

# **EXHIBIT 13**

# *Mendocino County Community Wildfire Protection Plan*



*Mendocino County Fire Chiefs' Association*

*California Department of Forestry  
and Fire Protection*

*Mendocino Unit*

*Wildfire Management Plan 2005*

## ***DEDICATION***

*To all the firefighters of Mendocino County,  
especially the volunteers  
who generously serve their communities night and day,  
saving lives, homes, and resources with no repayment  
except the gratitude of those they assist  
and the satisfaction of a job well done;  
and to these firefighters' families who,  
though often inconvenienced by the call to training or response,  
support and assist their loved ones in this selfless work.*

## ***IN GRATITUDE***

*Creation of this Community Wildfire Protection Plan would have been impossible without the assistance of Chuck and Liz Phillips Heath and the generosity of the Allen-Heath Memorial Foundation, a charitable family organization which yearly awards grants to many worthy nonprofit groups in Mendocino County.*

*The Heaths, residents of a fire-prone subdivision between Ukiah and Hopland, and President and Board Members of the Foundation, had made known their desire to support fire safe efforts in 2003, when the CDF firefighting Air Attack Base in Ukiah was in danger of closure due to a shortage of funds. In 2004, Mendocino County Fire Safe Council staff identified to the Heaths wildfire planning, including creation of this Community Wildfire Protection Plan, as the Council's top priority for the coming year. The Foundation graciously responded, and in November 2004 the Heaths presented the Fire Safe Council with a check for \$14,000 for that purpose.*

*This grant has fully supported the Council's efforts toward creating this Plan. All expenses related to the planning and outreach meetings, plus the Council's time spent in arranging meetings, compiling the information gathered, collaborating with CDF, and writing MCFSC's portions of the Plan, have been covered by the Allen-Heath Memorial Foundation's gift.*

*Mendocino County owes a great deal to local residents Chuck and Liz Phillips Heath and the Foundation they represent.*



# **COMMUNITY WILDFIRE PROTECTION PLAN**

## **AGREEMENT**

This Community Wildfire Protection Plan developed for Mendocino County:

- Was collaboratively developed. Interested parties and federal agencies managing land in Mendocino County have been consulted.
- Identifies and prioritizes areas for hazardous fuel reduction treatments and recommends the types and methods of treatment that will protect Mendocino County.
- Recommends measures to reduce the ignitability of structures throughout the area addressed by the Plan.

The following entities attest that the standards listed above have been met and mutually agree with the contents of this Mendocino County Community Wildfire Protection Plan.

*Signature on file*

Loyde Johnson, Mendocino Unit Chief  
California Department of Forestry and Fire Protection

*Signature on file*

Colin Wilson, President  
Mendocino County Fire Chiefs' Association

*Signature on file*

J. David Colfax, Chairman  
Mendocino County Board of Supervisors

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**CHAPTER 1**

**THE BEGINNINGS:**

**COUNCIL,**

**COUNTY,**

**AND**

**COMMUNITIES**

## **AN INTRODUCTION TO MENDOCINO COUNTY**

Mendocino County is located in California's north coast region, bounded by the Pacific Ocean to the west, Sonoma County to the south, Lake County to the southeast and east, Glenn and Tehama Counties to the east and northeast, Trinity County to the north and east, and Humboldt County to the north. The borders with Glenn and Tehama Counties are completely within the Mendocino National Forest in the county's northeastern portion.

Within an area of 3,510 square miles, Mendocino County's elevation runs from sea level at the ocean to 6,954 feet atop Anthony Peak, near the Tehama County border. Inland from 129 miles of magnificent coastline, the environment is as varied as the terrain. World-class vineyards thrive in the southern valleys, and stands of redwoods and Douglas-firs tower down from the Pacific Coast Range. Numerous mountain peaks over 6,000 feet grace the northeastern portion of the county and bear snow caps until early summer. Oak woodlands on rolling hills are scattered throughout the county.

The county is characterized by steep slopes, with the main ridges oriented north-northwest to south-southeast. Rivers and streams are abundant, some flowing year round and others drying up in the summer. The mighty Eel River drains to the north and the Russian River to the south. Rivers west of the first divide inland from the coast, just west of the Highway 101 corridor, drain basically east to west, to the ocean. These include, from south to north, the Gualala River North Fork, plus the Garcia, Navarro, Albion, Big, Noyo, and Ten Mile Rivers.

The county's mountains and hills are interspersed with nine distinct valleys:

- Potter Valley in the east central portion
- Round Valley to the northeast, with Covelo in its center
- Leggett Valley in the north, with the communities of Leggett and Piercy
- Long Valley south of Leggett, with Laytonville at its center
- Little Lake Valley in the county's center, surrounding the City of Willits
- Redwood Valley, just north of the Ukiah Valley
- Ukiah Valley in the south central area, with the City of Ukiah at its center
- Anderson Valley in the central western portion, including the towns of Yorkville, Boonville, Philo, and Navarro
- Sanel Valley in the south, with the community of Hopland

The population of Mendocino County is currently estimated at 88,000, with an overall density of only 25 persons per square mile. The majority of residents live in and around the valleys along Highway 101, which winds through the county from south-southeast to the north-northwest for

106 miles. Other population centers include the dozen or so communities along Highway 1, which travels the coast from the county's south end until it turns inland about 30 miles north of Fort Bragg and joins Highway 101 at Leggett. These towns are, from south to north, Gualala, Anchor Bay, Point Arena, Manchester, Irish Beach, Elk, Albion, Little River, Mendocino, Caspar, Fort Bragg, Cleone, Westport, and Rockport.

The county includes only four incorporated cities: Ukiah with approximately 15,000 residents, Willits with 5,000, Fort Bragg with 7,000, and Point Arena with 500. The rest of the county's local governments are special districts of various kinds, including community service districts, fire districts, water districts, and others established to provide specific services. The nature of governance relative to local fire protection services will be discussed in Chapter 2.

Wildland subdivisions and continuous areas of Wildland-Urban Interface or Intermix are predominant around the population centers, and these are likely to increase in size and number. Recent and upcoming improvements on Highway 101 make Mendocino County more and more attractive to persons desiring a rural lifestyle while commuting to work in Santa Rosa and even the San Francisco Bay Area.

One of the county's largest employers is agriculture, especially considering the trickle-down effect on other businesses dependent on agriculture. Commercial fishing is important to the coastal communities, especially Fort Bragg. Cottage industries, tourism, and recreation, along with the timber industry, round out the commercial character of the county. Light and heavy industry is in place, but inroads have been slow due to space, transportation, and environmental concerns. Governmental and nonprofit organizations are also large employers. Ukiah, the county seat, offers hundreds of jobs relative to government and public services, contains the county's largest concentration of medical and legal services, and hosts an ever-increasing number of large retail stores, motels and hotels, and restaurants.

Land use in Mendocino County includes agriculture (predominantly wine grapes and pears), timber production (Douglas-fir, coast redwood, ponderosa pine, sugar pine, and hardwoods), livestock production, and recreation. Cultivation of marijuana, either illegally or now legally for "medical" purposes, is prevalent in remote areas and contributes to the local economy. It at times presents a hindrance to fire safety efforts, however, due to the growers' desires to conceal their locations, as will be discussed in Chapter 4.

Mendocino County enjoys a Mediterranean climate, with dry summers during which typically no rain falls from early June to late October. The weather can vary greatly on the same day in different parts of the county. An average summer day may find the coastal areas at 60 degrees and inland temperatures at 90 to 105 degrees. The warmer the Sacramento Valley becomes, the deeper fog intrudes from the ocean up the coastal drainages, and the windier the inland valleys become. Diverse microclimates benefit from having four seasons and 40 to 100 inches of annual



rainfall, depending on the location, elevation, and weather patterns. The declared fire season in Mendocino County typically lasts from early June to mid or late October.

Vegetative fuel types in the county consist of grass, oak woodlands, brush, mixed chaparral, timber, and cut-over slash. Few areas of Mendocino County have not been harvested for timber in the past. Brush is usually composed of chamise on the south and west facing slopes and mixed chaparral on the north and east facing slopes. ***Mendocino County has seen very few large wildfires in the past several decades, resulting in a massive build-up of wildland fuels ready to burn.*** A majority of Mendocino County is in federal Condition Class 3 and Fire Regime III, with some areas in Regimes II and IV. Further data on factors influencing wildfire behavior are included in later sections of this Plan.

## THE MENDOCINO COUNTY FIRE SAFE COUNCIL

The Mendocino County Fire Safe Council, Inc. (MCFSC), was founded in 2003 by Colin Wilson, then President of the Mendocino County Fire Chiefs Association, and Julie Rogers, after they and many others had worked successfully to retain funding for the CDF Air Attack (firefighting) Base at the Ukiah Regional Airport. In discussing the fire situation in Mendocino County, Wilson, Rogers, and others agreed that a pro-active, community-based effort toward wildland fire safety was needed in Mendocino County. A primary motivation for starting the Council was the realization that county residents tend to rely too heavily on fire suppression resources without taking responsibility for their own safety, thus putting both themselves and firefighters in harm's way needlessly.

The first meeting toward creation of a fire safety effort, held in September 2003, was attended by ten local and CDF fire chiefs, who decided that a Fire Safe Council was the best format for such an effort. Such Councils, they learned, already existed in all their neighboring counties. In November 2003 four county residents attended a regional Firewise Communities workshop, at which they realized that local Fire Safe groups working under the umbrella of a county-wide organization was the best working model for this county.

The Council's first grant application was a success: it was awarded ArcView GIS mapping software through a Firewise Communities competition and thus became one of only five groups in California – and 27 nationwide – to be named Firewise “ArcView Communities.” This success gave the Council national recognition as an emerging wildfire safety organization, and has resulted in ongoing assistance from Firewise Communities.

In January 2004, the MCFSC held its first official meeting. Later that month the Council's first educational outreach meeting attracted an incredible response of 90 persons, who donated \$1,200 toward establishing the Council. The Council was incorporated in March and in April its Bylaws were approved. The majority of the initial Directors were fire

professionals, but measures were taken to ensure that soon the majority would be interested citizens, as is the intent for Fire Safe Councils and is now the case in the MCFSC.

Julie Rogers served as the MCFSC's volunteer Coordinator and Secretary until January 2005, when she was hired as Executive Director, courtesy of a Bureau of Land Management "Startup grant." The Council's first office was located in the Ukiah Valley Fire District station at 1500 S. State Street, courtesy of Chief Dan Grebil and his generous staff. The MCFSC now has an office in the Willow Water District's building at 151 Laws Avenue in Ukiah, next door to the Fire District.

## **MCFSC'S GOALS AND MISSION**

The Mendocino County Fire Safe Council is a coalition of individuals, businesses, and public and private agencies who share the goal of preventing loss of life, destruction of property, and damage to the environment caused by wildfire. The Council seeks to establish a broad partnership of stakeholders who will pool their resources and energies to pursue this common goal for the common good. The formal goals of the Council are:

- Work to minimize losses to values at stake, which include but are not limited to human lives, homes, animals, and natural resources;
- Educate residents, agencies, and other stakeholders about the nature and impacts of wildfire, fire prevention strategies, and effective preparedness in the event that wildfire occurs;
- Secure and utilize funding to assist residents in education, outreach, community projects, and other activities that further the mission and objectives of the Council;
- Encourage road associations, homeowner groups, subdivisions, towns, and other community groups to create their own Fire Safe Councils; and
- Act as an advocate for the people of Mendocino County in the area of fire prevention.

The MCFSC's broader vision for the future is described at the end of this Plan, and work is underway to create a comprehensive 5-Year Plan for its activities.

## **OFFICERS AND DIRECTORS**

President: George Britton, co-founder of the Pine Mountain Fire Safe Council  
Vice President: Colin Wilson, Chief, Anderson Valley Fire Department  
Secretary: Suzanne Guido, Robinson Creek Road Association  
Treasurer/CFO: Mike Jani, Chief Forester, Mendocino Redwood Company  
Robert Bruce, Editor/media consultant, survivor of Oakland Hills Fire  
Kelly Elder, DRA Consultants; Chair, Rancho Navarro Safety Committee  
Ronda Gott, Mendocino County Air Quality Management District  
Steve Leonard, Assistant Chief, Hopland Volunteer Fire Department

Angie Lish, North Coast Emergency Response Specialist, Pacific Gas & Electric Co.  
Hal Wagenet, Third District Supervisor, Mendocino County  
Jim Wattenburger, Second District Supervisor, Mendocino County (alternate)

## **LOCAL FIRE SAFE COUNCILS**

The Mendocino County Fire Safe Council encourages road associations, homeowner groups, subdivisions, towns, and any housing clusters to create their own local Fire Safe Councils. These groups need not have a formal or legal structure; they need only the desire to make themselves fire safe and to educate and encourage their neighbors to do the same. The MCFSC is available to – and does -- assist local Councils in these ways:

- Leading or participating in local educational events
- Providing educational materials for local distribution
- Connecting local Councils with Fire Safe service providers and vendors, other Councils, and anyone else who can assist their efforts
- Seeking grant funding for vegetation reduction or address signage projects
- Providing financial services such as holding trust funds or administering grant monies
- Generally assisting with administrative, business, financial, and legal functions, leaving local groups free to do on-the-ground projects and education

Local Fire Safe Councils already functioning or currently being organized are:

**Brooktrails, Sylvandale & Spring Creek Fire Safe Council (BS&SC FSC)**, in Planning Zone 1, was formed in January 2004 under the leadership of community members Bob Whitney, Barbara Willens, Sue Crawford, Jerry Garvey, and Richard Jergerson, with active involvement of Mark Tolbert, CDF Battalion 2 Chief, and the consistent support of Mike Chapman, General Manager of the Brooktrails Township. Brooktrails as a whole, and its subdivisions, are considered by fire professionals to be “a disaster waiting to happen.” The BS&SC FSC is not waiting for the disaster but is preparing to prevent and/or survive it.

This group, small but mighty, was the moving force behind the successful Brooktrails Township Fire Program grant application, submitted on their behalf by the county-wide Fire Safe Council. \$73,054 for fire planning and evacuation route vegetation removal will be received from BLM in 2006. Creation and refinement of that project saw extraordinary collaboration between the BS&SC FSC, CDF, MCFSC, and the Brooktrails Township Board of Directors, Fire Chief, Prevention Officer, and General Manager. The BS&SC FSC was also a partner in creation of a full-color evacuation brochure for their area in 2005. Details of that remarkable project – the first in the County – are given in Chapter 2’s description of the Brooktrails Fire Department.

**Pine Mountain Fire Safe Council (PMFSC)**, also in Planning Zone 1, is led by Lauren Robertson, Lynn Dee Johnson, George and Kathy Britton, Pat Collins, and other creative and energetic persons. Pine Mountain Estates is a Wildland-Urban Intermix community of 304 households distributed primarily on the western slopes of Pine Mountain, five miles east-southeast of Willits. It is under threat of a significant vegetation fire, as many lots are impacted by dense mixed forests of fir, oak, and madrone, and the roads are encroached by forests and extensive grass and brush.

The PMFSC was formed in June 2004 to educate their community about these hazards and to help mitigate them by encouraging residents to create “defensible space” around their homes and install proper address signage. Evacuation is a major concern, as many portions of Ridgewood Road, a paved county road which branches off into single-lane, unpaved private roads, are steep with no shoulders. CDF and PMFSC personnel are investigating areas which could serve as safety zones if evacuation were to become impossible; and CDF Captain Bill Baxter is preparing a detailed pre-fire plan for the area. In late 2005 the PMFSC and CDF collaboratively began major vegetation reduction around Pine Mountain’s water reservoir.

**Rancho Navarro Safety Committee**, at the northern end of Anderson Valley, is headed by Kelly Elder, an MCFSC board member.

**Other Anderson Valley communities** beginning Fire Safe efforts are Sky Ranch, Yorkville Ranch, Nash Ranch, Holmes Ranch, and “Smootville” toward the south end of the valley.

**Robinson Creek Fire Safe Council** southwest of Ukiah, led by Lillian Hoika and Sheryl Greene, is working on mapping, identifying and preparing safety zones, and establishing a phone tree. Details of their work are included in the CDF Battalion 3 report in Chapter 3.

**McNab Ranch Fire Safe Council** northwest of Hopland, formed in 2004 and led by Liz Phillips Heath, Hopland Assistant Fire Chief Steve Leonard, and others, has created a project for mapping and improved road signage for their area, which is at severe risk of wildfire.

Other Local Fire Safe Councils are being formed, and their names and work will be included in future versions of this Plan. The MCFSC and fire personnel in Mendocino County are very grateful to these dedicated groups who are performing an enormous amount of work toward making their Wildland-Urban Interface communities more “fire safe.”

## **CREATING THE PLAN**

A **Planning Collaborative** of 32 persons representing a broad range of interests provided overall direction for this Community Wildfire Protection Plan (CWPP). Its members included persons in leadership positions with the Bureau of Land Management (BLM), U.S. Forest Service (USFS), Natural Resources Conservation Service (NRCS), North Coast Resource Conservation & Development Council (RC&D), Mendocino Emergency Services Authority (MESA), Mendocino County Air Quality Management District, Pacific Gas & Electric Company, the county's largest timber landowner, a land conservancy, and other eminent persons and entities. A complete list is included in the Acknowledgements at the end of this chapter.

A **Core Team** of six persons implemented the Planning Collaborative's directives, made decisions in keeping with those directives, and took further actions as required during the Plan's creation. The Team consisted of four persons from the Mendocino County Fire Safe Council, including the President of the County Fire Chiefs, and two from CDF.

## **THE CWPP AND CDF UNIT PLAN AS ONE DOCUMENT**

As the membership of the Core Team suggests, creation of this Community Wildfire Protection Plan was primarily a cooperative effort of the Mendocino County Fire Safe Council and CDF's Mendocino Unit, with input from local government fire departments and others. At its first meeting in January 2005, the Planning Collaborative concluded that the Plan should be a blending of the CDF Mendocino Unit Wildfire Management Plan with further information gained and processed as needed to meet the requirements of a Community Wildfire Protection Plan.

Reasons for this decision were three. (1) The boundaries of Mendocino County and the Mendocino Unit are nearly the same. (2) The CDF Unit had already amassed much of the data needed. (3) CDF management in Sacramento had indicated in late 2004 its desire that CDF Units expand their Wildfire Management Plans into Community Wildfire Protection Plans. Although in April 2005 that requirement was withdrawn due apparently to an acknowledgement that joint Plans might be difficult to create, Unit Chief Loyde Johnson elected to continue pursuing a joint Plan; and MCFSC and CDF staff continued efforts toward that end as originally directed.

The Handbook for Wildland-Urban Interface Communities entitled "Preparing a Community Wildfire Protection Plan," in its Step Five, lists five risk factors to be considered in the creation of a Community Risk Assessment: fuel hazards; risk of wildfire occurrence; homes, businesses, and essential infrastructure at risk; other community values at risk; and local



preparedness and firefighting capability. Data collection and presentation of all these factors was a joint effort of CDF and MCFSC.

## **GEOGRAPHICAL PLANNING STRUCTURE**

At the first Planning Collaborative meeting, it was determined that, for CWPP purposes, the county's communities would be grouped into Planning Zones equivalent to the Mutual Aid Zones utilized by local emergency response personnel. Resources within a Mutual Aid Zone are called upon by local emergency responders -- fire and medical alike -- when a fire or other emergency exceeds the response capability of the local agency. These zones generally follow watershed boundaries and correlate closely with CDF battalions. The comparison is as follows:

**Mutual Aid Zone / Planning Zone 1:** North and northeast areas of county  
CDF Battalions 1, 2, and 4

Towns and fire departments: Covelo, Willits, Brooktrails, Laytonville, Leggett, and Piercy  
Watersheds: Eel River, including North Fork, Middle Fork, and South Fork

**Planning Zone 2:** Southeast and central portion of county  
CDF Battalion 3

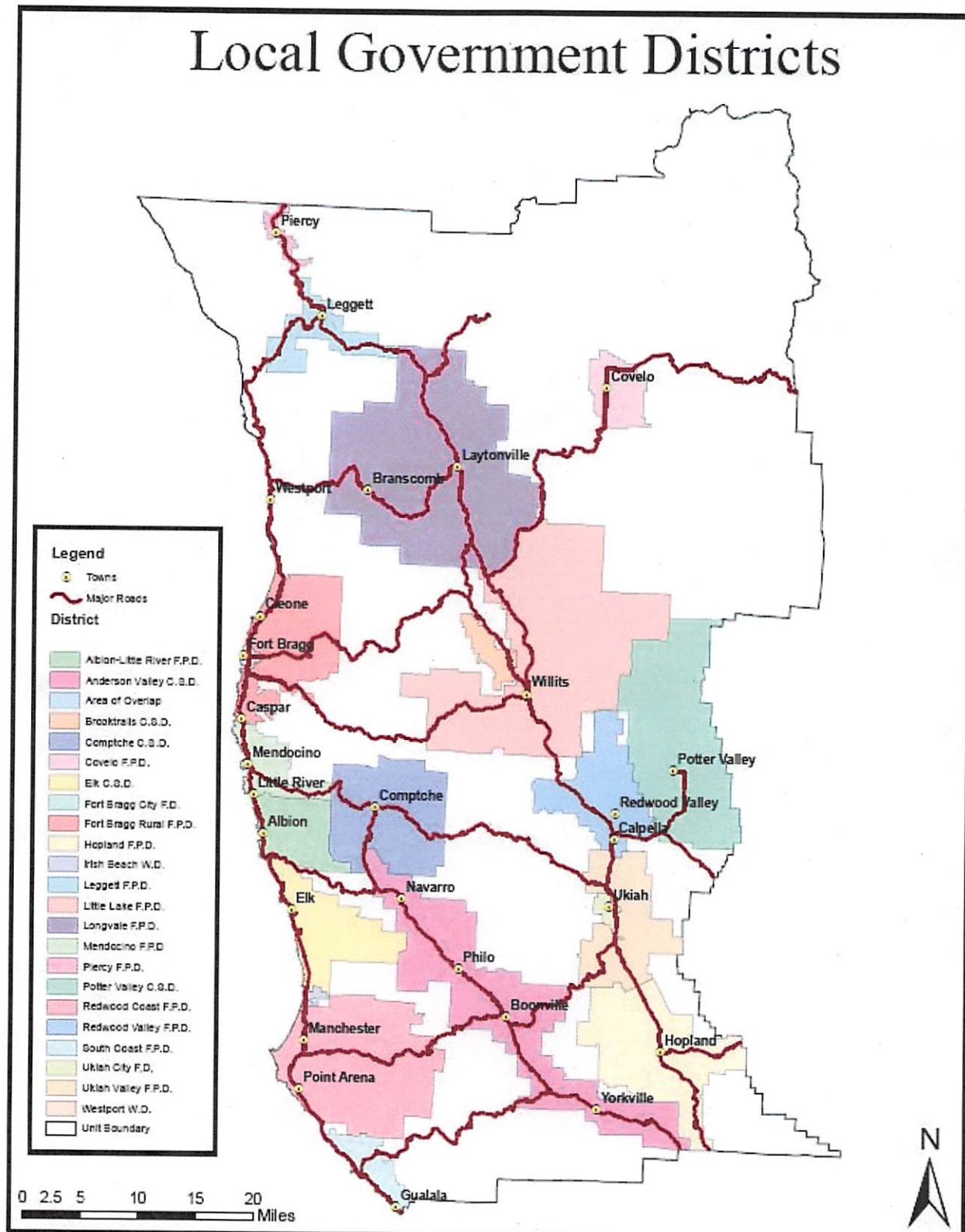
Towns and fire departments: Ukiah, Redwood Valley, Hopland, and Potter Valley  
Watersheds: Russian River, plus Eel River north of Potter Valley

**Planning Zone 3:** Southwest area of county  
CDF Battalion 5

Towns and fire departments: from Anderson Valley, including Yorkville, Boonville, Philo, and Navarro, to Gualala, Point Arena, Manchester, and Elk on the South Coast  
Watersheds: North Fork Gualala, Garcia, Russian, and Navarro Rivers, and Dry Creek

**Planning Zone 4:** West central and coastal region of county  
CDF Battalion 6

Towns and fire departments: Albion, Little River, Mendocino, Fort Bragg, and Westport on the coast, plus Comptche nine miles inland of Mendocino  
Watersheds: Albion, Big, Noyo, and Ten Mile Rivers, and Salmon Creek



## **AN ONGOING PROCESS: UPDATING THE PLAN**

The Handbook mentioned above recommends eight steps in preparing a CWPP:

- 1) Convene decision-makers
  - 2) Involve federal agencies
  - 3) Engage interested parties
  - 4) Establish a community base map
  - 5) Develop a community risk assessment
  - 6) Establish community hazard reduction priorities and recommendations to reduce structural ignitability
  - 7) Develop an action plan and assessment strategy
  - 8) Finalize the CWPP
- ... plus providing for ongoing updates

This Plan is primarily a blending of previously-gathered and recently-updated CDF Mendocino Unit data with fresh, local, grass-roots input. Assessment and analysis of the data is not as complete and refined as the partners would have preferred; however, this Plan is only the first edition of a CWPP which will be updated, improved, and enlarged yearly as fire planning efforts in Mendocino County develop and mature.

Each year the following, at a minimum, will be performed to update this CWPP:

- Further input and participation will be sought from local fire departments so the Plan may benefit from their experience and expertise.
- The Fire Safe Council, in conjunction with local fire departments and CDF, will sponsor outreach meetings throughout the county to gain a better understanding of assets at risk, levels of risk, community values, existing natural and manmade fuel breaks, priorities for projects, and other pertinent data.
- Local communities will be encouraged and supported to form their own Fire Safe Councils, reduce their wildland vegetative fuels, create accurate local maps, and determine practical plans for being safe during a wildfire. Such information, as appropriate, will be appended to future editions of this county-wide Plan.
- CDF personnel will update their Unit and Battalion data, analyses, plans, and reports.

Additional collaboration and ideas will be pursued as described in Chapter 4.

## **DOCUMENTATION OF THE PLANNING PROCESS**

All actions related to seeking collaborators, setting up meetings, gathering data, actions taken at meetings, names and contact information of meeting attendees, and other efforts to create this Plan have been meticulously documented, because *this Plan is intended to become part of a future Mendocino County Local Hazard Mitigation Plan, as required by the federal Disaster Mitigation Act of 2000*. Such a Plan will address all natural disasters which could



impact Mendocino County. Detailed reports on meetings of the Planning Collaborative and the Core Team, plus many other records, are available from the MCFSC.

## **COMMUNITY OUTREACH MEETINGS: GAINING COLLABORATION AND INFORMATION**

The minimum requirements for a CWPP as described in the Healthy Forests Restoration Act of 2003 are (1) Collaboration, (2) Prioritized Fuel Reduction, and (3) Treatment of Structural Ignitability -- plus the agreement and sign-off of local government, local fire departments, and the state entity responsible for forest management, which in this case is CDF.

CWPP guidance documents identify “collaboration” as pertaining to local and state governments, federal agencies, and “other interested parties.” In the spirit of the National Fire Plan, the California Fire Plan, and the Western Governors’ 10-Year Comprehensive Strategy, *the Planning Collaborative decided to facilitate and emphasize inclusion of the ideas and concerns of the County’s most important “other parties,” namely its rural residents most at risk to devastation by wildfires.*

Because of this desire to emphasize “grassroots” collaboration, upon direction of the Planning Collaborative and further refinement by the Core Team, the MCFSC undertook to hold meetings around the county to make contact with, and gain information from, persons living in Wildland-Urban Interface (WUI) communities. Twelve cities and towns were ultimately identified as population centers that would allow almost all the county’s residents to attend a meeting with a maximum 30-minute drive. Holding so many meetings required significant time and effort, but the Core Team wished to make attendance as easy as possible and thereby to ensure true grassroots involvement and ownership in the Plan.

The meetings proved even more valuable than anticipated, not only because of the depth of information gathered from local residents but also because strong contacts were made with wildfire-conscious persons all over the county. The MCFSC will maintain ties with these persons, toward establishing local Fire Safe Councils and, in conjunction with local fire departments and CDF, identifying and performing needed fire safe activities, including prioritized vegetation reduction projects.

In addition, friendships were made and bonds established between the MCFSC and local fire chiefs and firefighters. Meeting facilitators were highly impressed with the knowledge, concern, energy, determination, perseverance, and sacrifice of rural volunteer firefighters who serve their communities faithfully, often with outdated equipment and small numbers of personnel. Chapter 2 describes each of these departments.

The towns in which meetings were held, and the dates, are as follows:

<b>COMMUNITIES INCLUDED</b>	<b>MEETING LOCATIONS</b>	<b>DATES</b>
<b><u>Mutual Aid / Planning Zone 1</u></b>		
Covelo/ Dos Rios	Covelo U.S.F.S. Station	May 9
Willits/ Brooktrails/ Pine Mountain	Brooktrails Fire Station	April 20
Laytonville/ Branscomb	Laytonville Fire Dept. Hall	May 2
Leggett/ Piercy (2 meetings)	Leggett School Cafeteria	April 5 & 26
<b><u>Mutual Aid / Planning Zone 2</u></b>		
Ukiah	Ukiah Valley Fire District	April 19
Redwood Valley	Redwood Valley Fire Station	April 12
Hopland/ McNab Ranch	Hopland Elementary School	March 29
<b><u>Mutual Aid / Planning Zone 3</u></b>		
Anderson Valley: Yorkville/ Boonville/ Philo/ Navarro	Boonville Fire Station	March 22
Point Arena/ Gualala/ Elk/ Manchester	Point Arena Veterans Hall	April 25
<b><u>Mutual Aid / Planning Zone 4</u></b>		
Mendocino/ Fort Bragg/ Albion/ Little River/ Comptche	Mendocino Fire Station	April 28
Westport	Westport Fire Station	May 4

The remarkable data, concerns, and ideas gathered from these meetings are listed in Chapter 3, Part 2, which is organized by Mutual Aid Zones and CDF Battalions. Appendix B of this Plan contains an extensive list of WUI Communities in each Zone as provided by local residents. Additional thoughts and conclusions are given in Chapter 4.

The MCFSC and CDF were unable to raise local interest for a meeting in only one targeted town: Potter Valley. We hope to gain input from that area's residents for inclusion in future revisions of this Plan.

## **COMMUNITY MEETING FORMAT**

The format for the community meetings was created by the Core Team. Each meeting began at 7:00 p.m. with an introduction to the Fire Safe Council's mission, an explanation of the concept of Wildland-Urban Interface/Intermix (WUI) communities, and a description of a Community Wildfire Protection Plan (CWPP) and why one is needed. Most meetings ended with fire safe education and motivation given by a local or CDF fire chief. Several pieces of fire safe literature, and extra copies for neighbors, were sent home with attendees. A 4-page educational Wildfire Risk Assessment, adapted from an assessment created by Firewise

Communities, based on California Public Resources Code sections 4290 and 4291, and addressing the realities of Mendocino County, proved to be an especially helpful tool.

The middle portion of each meeting was used to gain three kinds of information:

- Names and locations of WUI communities. These were taken verbally and written on large sheets of paper posted on the walls. One long-time local fire chief commented that this process informed him about housing clusters of which even he was unaware. These WUIs are listed in Appendix B.
- Assets at risk in each community, as perceived by attendees. These were written on questionnaires completed by participants and collected at the end of each meeting. The results are given in Chapters 3 and 4.
- Concerns -- and ideas for resolving them -- written by participants with large markers on colored sheets of paper which were posted on a "sticky wall." The sticky wall, which was quite popular, consisted of a large piece of cloth covered with spray adhesive, allowing sheets to be placed on it and grouped together as desired by attendees. These concerns and ideas are listed at the end of each CDF Battalion report in Chapter 3.

## ACKNOWLEDGEMENTS

**The Planning Collaborative** consists of the persons who attended organizational meetings on January 4 and February 23, 2005. This list is alphabetical and includes affiliations as they were at the time of the meetings.

Tara Athan	Coordinator, Mendocino Coast Weed Management Area
Blaine Baker	District Ranger, Upper Lake and Covelo Districts, Mendocino National Forest, U.S. Forest Service
Scott Barr	CalTrans; Board Member, MCFSC
George Britton	MCFSC President; Co-Chair, Pine Mountain Fire Safe Council
Rich Burns	Ukiah Field Office Manager, Bureau of Land Management (BLM)
Bob Ceriani	Battalion Chief, Prevention Bureau, Mendocino Unit, CDF
Jim Dawson	Fire Management Officer, Ukiah Field Office, BLM
Todd Derum	Battalion Chief, Battalion 3, CDF
Kelly Elder	Rancho Navarro Safety Committee; MCFSC Board Member
Ronda Gott	Mendocino County Air Quality Management District
Dan Grebil	Chief, Ukiah Valley Fire District
Chuck Heath	President, Allen-Heath Memorial Foundation; McNab Ranch Road Association

Liz Phillips Heath	Allen-Heath Memorial Foundation; McNab Ranch Road Association
Mike Jani	Chief Forester, Mendocino Redwood Company; MCFSC founding Board Member
Loyde Johnson	Mendocino Unit Chief, CDF; Mendocino County Fire Warden
Steve Leonard	Assistant Chief, Hopland Volunteer Fire Department; MCFSC founding Board Member
Angie Lish	Emergency Response Specialist, PG&E; MCFSC Board Member
Clare Nunamaker	Consulting Forester; MCFSC Board Member
Rick Paige	Executive Director, Mendocino Emergency Services Authority (MESA, the County Office of Emergency Services)
Julie Rogers	Executive Director, MCFSC
Richard Shoemaker	President, Green Lion Landscaping; former County Supervisor; MCFSC founding Board Member
Stephen Smith	District Conservationist, Natural Resources Conservation Service (NRCS)
Kate Symonds	Coordinator, North Coast Resource Conservation & Development Council
Jon Teutrine	Fuels Management Specialist, U.S. Forest Service
Stevie Thomas	Manager, Fire Safe Yard Services, a local fuels reduction business
Craig Titus	Fire Captain Specialist, Pre-Fire Engineer, CDF
Mark Tolbert	Battalion Chief, Battalion 2, CDF
Jeff Tunnell	Fire Prevention Technician, U.S. Forest Service
David Vincent	Fire Prevention Patrol, Covelo District, U.S. Forest Service
Bob Whitney	President, Golden State Land Conservancy; Chair and founder, Brooktrails, Sylvandale & Spring Creek Fire Safe Council
Colin Wilson	President, Mendocino County Fire Chiefs' Association; Chief, Anderson Valley Fire Department; Vice-President, MCFSC

**The Core Team** met multiple times during January through August 2005. Its members:

George Britton	MCFSC President
Kelly Elder	MCFSC Board Member
Julie Rogers	MCFSC Executive Director
Colin Wilson	MCFSC Vice-President
Craig Titus	CDF Pre-Fire Engineer, responsible for yearly creation of the Mendocino Unit Wildfire Management Plan
Mark Tolbert	CDF Battalion Chief, appointed by Unit Chief Loyde Johnson as his liaison to the CWPP effort

Three MCFSC Core Team members maintained regular contact with the Chiefs of both local fire departments and CDF, including at meetings of the County Fire Chiefs' Association, soliciting their information and involvement, and reporting on Plan progress.

**Facilitators for the public outreach meetings** were George Britton, Mark Tolbert, Todd Derum, Colin Wilson, Steve Leonard, Tara Athan, Steve Smith, Kelly Elder, and Julie Rogers. Ms. Elder, who professionally facilitates public meetings, trained all facilitators free of charge and contributed the "sticky wall" concept.

**CDF Unit Plan overview sections** in Chapter 3, Part 1, were provided by Unit Chief Loyde Johnson and Pre-Fire Engineer Craig Titus. **CDF Battalion reports** in Chapter 3, Part 2, were contributed as follows, with positions listed as held in Spring of 2005:

Battalion 1: Battalion Chief Bob Rodello

Battalion 2: Battalion Chief Mark Tolbert

Battalion 3: Battalion Chief Todd Derum and Captain Brian Kornegay

Battalion 4: Battalion Chief Larry Grafft

Battalion 5: Battalion Chief Dean Watson and Captain Pam Linstedt

Battalion 6: Battalion Chief Dean Watson

**The primary authors and compilers of this Plan** were (1) Craig Titus of CDF, who compiled all CDF fire data; facilitated participation by CDF Battalion Chiefs; created all maps, charts, and graphs at both the Unit and Battalion levels; and assembled the Plan; and (2) Julie Rogers of MCFSC, who compiled data about local fire departments; gathered descriptions of proposed fire safe projects; wrote most of Chapters 1, 2, and 4; determined how the material would be blended into one document, and served as overall editor.

Special thanks are due to Chief Dan Grebil and his gracious staff at the Ukiah Valley Fire District for making their training room available for Fire Plan meetings. Other persons who contributed to this Plan are noted in Chapter 3's descriptions of the community meetings.

**CHAPTER 2**

**LOCAL HEROES:**

**THE VOLUNTEER**

**FIRE DEPARTMENTS**

**OF MENDOCINO COUNTY**



## **LOCAL FIRE DEPARTMENTS: MODELS OF SERVICE AND SACRIFICE**

Mendocino County owes very much to its local fire agencies, many of which are staffed completely by volunteers and whose personnel are often the first to arrive at wildland fires and other emergencies. Most of these agencies are in Fire Protection Districts (FPDs) or Community Services Districts (CSDs) which are governed by elected boards of directors and have authority to levy taxes to support their work.

Only 3 of the county's 21 local fire agencies have paid firefighters or a chief on duty around the clock: the Ukiah City Fire Department, with 5-6 firefighters on duty at a time for calls within the Ukiah city limits; the Ukiah Valley Fire District, which serves the greater Ukiah Valley area with 2 paid firefighters on duty at a time; and the Redwood Valley-Calpella Fire District, which has paid Chief Officer staffing of one person 24 hours a day. The rest of the departments' coverage outside of weekday business hours is on a volunteer basis.

The map at the end of this chapter shows the locations and boundaries of these districts. Areas adjacent to a district but not included in it are referred to as the agency's "sphere of influence." Although they pay no taxes or fees, people in these areas still receive services, because the county's emergency responders never refuse to help someone in need. As is noted repeatedly in this chapter, however, such situations can become very frustrating to cash-strapped departments and can be a source of irritation to those who pay their share for emergency services. Most departments supplement their tax base income with at least one major fundraiser a year – usually barbeques with live music, which are well-supported, extremely popular social events.

Fires in wildlands, structures, vehicles, dumpsters, and similar situations account for only 10% to 20% of the calls to which local agencies respond. Medical aid calls are by far in the majority – an average of 80% for most departments -- with traffic accidents and other rescue situations following. Consequently, county firefighters undergo training in medical response, extricating patients from vehicles, responding to hazardous materials ("haz mat") incidents, and a variety of other emergency skills – thus the common term "Fire-Rescue." A high percentage of volunteers are First Responders or Emergency Medical Technicians (EMTs), both of which require significant training. Fire departments on the coast are often called to assist in cliff rescues and other water-related emergencies and have equipment and volunteers to meet that need.

Firefighter training or "drill" in most of the county's departments involves one night a week plus additional trainings on weekends. Firefighters often train with other departments,

especially on training burns, in which abandoned buildings or wildland fields are burned for training purposes. Some firefighters travel out of county to obtain training and certification in specialized fields. In addition, trainings are brought into the county. An example is the 40-hour Wildland Fire Academy held in Ukiah for two weekends in April 2005, during which 50 firefighters (including the MCFSC Executive Director) received introductory hands-on training in all aspects of wildland fire behavior, suppression tools and techniques, and firefighter safety.

The County Training Officers – see [www.mendocinocountyfiretrainingofficers.com](http://www.mendocinocountyfiretrainingofficers.com) – meet regularly. The County Fire Chiefs’ Academy, held every January through March for new volunteers or those needing a refresher, consists of a demanding 10 to 20 hours of training each weekend for 12 weeks. Classes are hosted by departments around the county and taught mostly by volunteers. Costs of travel and accommodations are usually borne by the students – just one example of the sacrifices made by the County’s volunteer firefighters.

The Mendocino County Fire Chiefs’ Association, which includes both local and CDF chiefs, meets on the second Wednesday of every other month and is newly headed, as of November 2005, by Fort Bragg Fire Chief Steve Orsi. Attendees include representatives of other County emergency services: CALSTAR, Coastal Valleys Emergency Medical Services, Office of Emergency Services, Redwood Empire Hazardous Incident Team (REHIT), California Highway Patrol, County Sheriff’s Office, and most recently the Fire Safe Council.

***Mendocino County has an extraordinarily strong and effective mutual aid system***, among all agencies and for all types of emergency response. Local fire departments are quick to assist each other and CDF, and vice versa, most often within the Mutual Aid Zones around which this Plan is organized, but beyond those as needed. In August 2005, the Fisher Fire in timber in the county’s southwest corner attracted a strike team of “immediate need” local fire department engines outside of Mutual Aid Zone boundaries. On wildfires, CDF and local firefighters, paid and volunteer, work side by side as equals, all in yellow Nomex fire resistant clothing and barely distinguishable from each other in appearance and skill. On medical aid calls, local fire departments, local ambulance services, CDF, and CALSTAR’s or REACH’s emergency transport helicopters all work as one team.

In sum, the combination of paid and volunteer staff provides excellent emergency response services to the county’s residents and those visiting or passing through. Mutual Aid Zone coordinators are Chiefs Jeff Smith of Little Lake Fire (Zone 1), Dan Grebil of Ukiah Valley Fire (Zone 2), Robert Beacon of Greenwood Ridge (Zone 3), and Steve Orsi of Fort Bragg Fire (Zone 4). As of November 2005, Chief Grebil is the new Mendocino Operational Area Fire & Rescue Mutual Aid Coordinator, taking over the reins from Chief Orsi.



## THE VOLUNTEER FIRE DEPARTMENTS

A description of each of Mendocino County's local fire agencies follows, listed by alphabetical order within each Mutual Aid Zone. Data and comments were provided primarily by their Chiefs. Note: Insurance Service Office (ISO) ratings are assigned to localities by the insurance industry according to their fire suppression capabilities, available water supply, and other factors, with a rating of 1 indicating the best possible situation. Homeowners' fire insurance costs are calculated in part according to these ratings.

### MUTUAL AID/ PLANNING ZONE 1

**BROOKTRAILS FIRE DEPARTMENT**, under Chief Daryl Schoeppner's leadership, is part of the Brooktrails Township Community Services District. Its 20 volunteers include 11 Emergency Medical Technicians (EMTs) who serve 4200 residents and 1750 homes in heavy forest fuels covering 7.5 square miles. Calls per year average 300, five of which are wildfires; and Fire Prevention Officer Captain Jon Noyer heads an aggressive weed abatement program to reduce the impact of these. The Chief, Captain, and a part-time office assistant are the only paid personnel. Six pieces of equipment, including a new Ferrara Type 1 structure protection engine, one Type 2 engine, one Type 3 wildland engine, one squad (a sturdy pickup with a small pumper and water supply), a reserve Type 1 engine, and a water tender (tanker), are deployed from two stations. Insurance Service Office (ISO) ratings are 5 within the district and 9 outside; the rating of 5 is due to the abundance of water and an excellent system of fire hydrants.

One of the department's valued members is Eddie the Arson Dog, a beautiful Golden Retriever who is one of only 100 dogs in the United States certified by the Canine Accelerant Detection Association to the level that evidence from his work is admissible in court. Eddie is available to assist outside his area – "will work for food!" -- and may be reached at (707) 459-4441 or [firedept@btcsd.org](mailto:firedept@btcsd.org).

Chief Schoeppner and Captain Noyer, with input from their local Fire Safe Council, CDF, and others, have recently accomplished a milestone for their densely-populated area with limited evacuation routes: the printing of full-color, glossy evacuation brochures with maps. The brochures, funded by the Community Services District, were mailed to all District households in August 2005, and are available on-line at [www.btcsd.org](http://www.btcsd.org); go to the fire department link.

**COVELO FIRE PROTECTION DISTRICT**, led by Chief Bill Baker, serves 50 square miles and 3200 residents in the Round Valley area, near the Mendocino National Forest.



Responders include 21 volunteers, of whom 12 are EMTs and 2 are First Responders. Medical calls are numerous. An ambulance service with 2 Basic Life Support (BLS) units is part of the district, whose medical response area extends from the 8-mile bridge on Highway 162, to the Tehama County line, to the Trinity County line, and to the top of Forest Highway 7 in the National Forest. More than 600 Round Valley residents are CALSTAR subscribers, paying \$55 per year to be eligible for helicopter transport services for no cost beyond their insurance coverage. The nonprofit CALSTAR is truly a God-send for this and other remote areas from which ground transport would take much more than the maximum "Golden Hour" within which to save the lives of persons in critical need of hospital care.

The only persons reimbursed for services are the Fire Chief and the records billing officer, both part-time. Response equipment is 1 water tender, 2 Type 1 heavy engines, 2 Type 3 wildland engines, 2 Type 1 ambulances, and 1 chief's "squad" pickup truck with a 150-gallon tank. A new Type 3 engine will arrive later this year, as will a Type 3 ambulance. Calls total about 670 a year, with 60% of the 70 fires being in the wildland. The District's ISO rating is 9 for businesses and 8 for residential areas. Current concerns are the closing by the Department of Fish and Game of a critical fire access road, and that fact that most of the many calls to the Indian Tribes in the Valley are not reimbursed. Chief Baker may be reached at (707) 983-6719 or [covelofire@pacific.net](mailto:covelofire@pacific.net).

**LEGGETT VALLEY FIRE PROTECTION DISTRICT**, headed by Chief Ely Reighter and Captain Steven Doyle, is located in the county's north-northwestern corner, where Highway 101 and Highway 1 converge. During the period when Piercy's fire department was not functioning, Leggett's all-volunteer department of 9 firefighters responded to many of Piercy's calls as well. Lack of funding is a major concern. The county contributes \$18,000 a year, but the district's tax base is very small. Funding for a long-awaited new four-wheel-drive wildland fire engine was awarded through a federal Assistance to Firefighters grant, and the unit will be delivered in January 2006. Gaining the required 10% match amount for the engine took significant effort and funds from many sources.

Until the new engine arrives, the department's resources consist of only a very old CDF Type 3 engine, a federal excess 3000-gallon water tender, and a 4-wheel-drive rescue unit which carries up to five volunteers, the "jaws of life" tool for extricating trapped passengers, and other emergency rescue equipment. Traffic accidents account for a large percentage of calls, at approximately 50 per year, out of a total of 120 calls. Four to five small vegetation fires and one or two structure fires occur in most years, and the balance of calls are medical aids. The area's ISO rating is 9. The department may be reached at [leggettfire@gmail.com](mailto:leggettfire@gmail.com).

**LITTLE LAKE FIRE PROTECTION DISTRICT**, headed by Chief Jeff Smith and located in the center of the County, serves both the City of Willits and the surrounding areas, and is funded by property taxes, a special fire tax, and fundraisers. The District encompasses 380 square miles and over 10,000 residents. Three paid personnel are the Chief, training



officer Carl Magann, and mechanic John Thomen. Of the 37 volunteer firefighters, the average age is 35, but some have up to 35 years of fire experience. The department boasts two stations housing a 75' ladder truck, 5 engines, a 4000-gallon water tender, 2 quick-attacks, 1 command unit, 1 utility, 1 hazardous materials (haz mat) unit, and a swift water rescue unit. Volunteers include one paramedic and 15 EMTs, and the rest are First Responders. Of the 600 annual emergency responses, about 50, or 12%, are to wildfires. Personnel respond to many vehicle accidents outside the district, especially on Highways 101 and 20, which intersect in Willits and see heavy tourist traffic. Assistance to emergency calls in the area just south of Willits is also supplied by the Ridgewood Ranch Volunteers, who live in the beautiful pastoral area which was once home to the famous race horse Seabiscuit.

The District's ISO rating is 4 inside the City of Willits and in outlying areas with hydrants, and a Rural 8 in outlying areas within 5 miles of the stations. Within the boundaries of the District are BLM lands, two Indian Rancherias, a large wildlife habitat at the north end of the valley, and three subdivisions of special concern: Pine Mountain Estates, the Ridgewood Subdivision, and the String Creek Subdivision. Due to the District's high fire risk, there is a strong need for planning requirements more stringent than those currently used by the County Planning and Building Department or imposed by California Public Resources Code section 4290. Chief Smith may be reached at (707) 459-6271 or [willitsfire@sbcglobal.net](mailto:willitsfire@sbcglobal.net).

**LONG VALLEY FIRE PROTECTION DISTRICT**, led by Chief Jim Little and locally known as the Laytonville Fire Department, has 26 dedicated volunteers, 15 of them EMTs, who respond to 425 calls per year, of which 20 are wildfires. Chief Little is also Chief Forester for Harwood Products in Branscomb and a member of the County Planning Commission. Two paramedics are paid staff 8 hours a day with a 16 hours a day callback. Equipment includes 5 engines, 1 rescue unit, and 2 Advanced Life Support (ALS) ambulances, located at the main station in Laytonville and a second station in Branscomb to the west. One of the county's three California Office of Emergency Services (OES) fire engines is located at the Laytonville station. Having one of these engines brings the responsibility of providing firefighters to respond with the engine when an OES strike team is requested. The District includes 250 square miles and 3000 residents, with an additional 1000 in the extended sphere of influence.

Areas of special concern to fire personnel are the Nature Conservancy's Wilderness Lodge and the subdivisions of Ten Mile Creek, Woodman Canyon, Jack of Hearts Creek, and Cherry Creek. The department serves the large Bell Springs area without reimbursement. ISO ratings are 5 in Laytonville proper, 9 in areas beyond five miles from the station, and 10 outside the district. The department may be contacted at (707) 984-6055 or [laytfire@mcn.org](mailto:laytfire@mcn.org).

**PIERCY FIRE PROTECTION DISTRICT**, headed by Chief Robert Kirk, is a story of perseverance and success. Located just south of the Humboldt County Line in the county's



far northwestern corner, the district encompasses only 8 square miles but serves the traffic on Highway 101, at least 200 residents beyond its boundaries, and Richardson Grove State Park without reimbursement. The department experienced a break in service in 2004-2005 due in part to burnout of its volunteers after responding to a series of terrible highway accidents. Several Piercy residents, however, rallied by resident Jeff Hedin, refused to be defeated and began serious efforts to re-establish service. Mr. Hedin eloquently presented the district's plight to the County Supervisors at their workshop on local fire departments in February 2005; see the last section of this chapter for details on that event.

Piercy's efforts have been successful. As of August 2005, the district is functioning again, and enthusiasm is continuing to build. Nine volunteers, all of whom are First Responders, plus a volunteer mechanic and volunteer secretary, serve the area. Interestingly, only half of these actually live inside the district. Mr. Hedin notes that they would like to expand the district's boundaries to include several WUI housing developments, but the cost of related elections would be higher than the benefit gained. The County contributes \$8,000 to the district each year, and the musical Reggae on the River and the motorcycle Redwood Run events contribute significant donations in exchange for provision of emergency services.

Equipment includes a Type 3 wildland engine, a Type 1 engine, and a small "quick attack" vehicle. A small grant was recently received for much-needed personal protective equipment, which is now being purchased. The department responds to about 20 calls per year, of which 10% are wildfires. A location of special wildfire concern is BLM's Red Mountain area to the southeast. Chief Kirk may be reached at (707) 247-3449, 247-3020, or [rkirk@humboldt.net](mailto:rkirk@humboldt.net).

**WHALE GULCH VOLUNTEER FIRE COMPANY**, headed by Chief Leif Larson, is located in the far northwestern corner of Mendocino County, west of Piercy. Due to the locations of roads in that area, Whale Gulch volunteers are dispatched from Humboldt County and work in conjunction with Humboldt County fire departments.

## **MUTUAL AID/PLANNING ZONE 2**

**HOPLAND FIRE PROTECTION DISTRICT**, led by Chief Hoss Milone and Assistant Chief Steve Leonard, serves 5000 residents across 110 square miles, plus an additional sphere of influence of 1200 residents on another 100 square miles. Of 300 calls per year, about 10 are to wildfires. Personnel respond from three locations: the main station in downtown Hopland, the Retech engineering complex several miles north, and the CDF fire station on Highway 101 north of Hopland. Land for a much-needed new fire station has been obtained on the southwest edge of town and construction should begin in 2006.



The only paid position is one part-time Captain. Currently, out of an authorized 24 volunteers, only 15 positions are filled. Five volunteers are EMTs and 7 are First Responders. Fire equipment includes 4 engines, 1 rescue unit, 1 utility pickup, and 1 water tender. ISO ratings are 7 within the community of Hopland itself and 8 in the rural areas. Areas of special concern regarding wildfires are McNab Ranch and the Hopland Indian Rancheria, plus the Bell Track and Russian River Estates WUI communities. The department's major needs are additional funding and more volunteers available during daytime hours. Chiefs Milone and Leonard may be reached at (707) 744-1222 or [hoplandvfd@pacific.net](mailto:hoplandvfd@pacific.net).

**POTTER VALLEY FIRE DEPARTMENT**, headed by Chief Bill Pauli, is a nonprofit corporation providing fire protection under an agreement with the Potter Valley Community Services District. As Chief Pauli was until very recently President of the California Farm Bureau, Assistant Chief Danny Thornton has shared the department's leadership. Volunteers number 24, of which 6 are EMTs, and the department strives to ensure that at least 8 volunteers are available at any given time. The department serves 3500-4500 people spread over 275 square miles, including the portion of Mendocino National Forest within Mendocino County. Very remote areas accessed only by unpaved roads, including but certainly not limited to Sanhedrin Mountain, Hull Mountain, and Lake Pillsbury, also receive their services. Mutual aid is provided to the Upper Lake area in Lake County to the east when requested.

The apparatus fleet includes 2 structure engines, 2 Type 3 Model 1 engines, 1 Rescue, and a 4400-gallon water tender. One engine is stationed at the home of a volunteer who is usually available round the clock. The district has no fire hydrants, but the huge water tender and many agricultural ponds throughout the valley floor give the area an ISO rating of 8. Calls per year are about 143, 83% of those being medical aids. Wildfires typically number 12-14 per year and structure fires 8-10. Chief Pauli may be reached at (707) 743-1173.

**REDWOOD VALLEY-CALPELLA FIRE PROTECTION DISTRICT**, headed by Chief Tom Hession, serves 82 square miles and 7500 residents. Its 3 paid staffers provide 24-hour Chief Officer coverage, and its 25 volunteers include 18 First Responders and 7 EMTs. Several of the volunteers work in public safety positions with other departments, some have up to 25 years of firefighting experience, and 2 volunteers and 2 young Explorers are women. Five engines, 2 rescue/medical units, 2 350-gallon patrol units, and a 2000-gallon water tender respond to approximately 500-600 calls per year, of which up to 15% are wildfires.

The district includes several Wildland-Urban Interface areas of concern. The CDF Battalion 3 report in Chapter 3 describes an effort to address the problem of life safety in the event of a large wildfire in two of the area's most problematic locations: Cave Creek and Greenfield Ranch. In some areas evacuation will not be possible, so safety zones are being identified and prepared. The heavily-fueled wildland area at the north end of Lake Mendocino is



another one of special concern to the district. ISO ratings are always an issue, and the district believes that some residences on the valley floor deserve more beneficial ratings than they currently have. Chief Hession may be contacted at (707) 485-8121 or [redwoodvlyfire@pacific.net](mailto:redwoodvlyfire@pacific.net).

**UKIAH FIRE DEPARTMENT**, headed by Chief Kurt Latipow and Fire Marshal Chuck Yates, operates as a department of the City of Ukiah. Its response area is the 4.5 square miles and 15,060 residents within the Ukiah city limits. However, as Ukiah is the largest government, business, and services center for the county, thousands of additional persons may be in Ukiah during weekday office or shopping hours. The department has by far the largest paid staff in the county, with 18 firefighters working 56-hour shifts. Fifteen volunteers balance out the response force, which includes a total of 15 paramedics and 5 EMTs. Apparatus includes 2 engines, 1 ladder truck for reaching taller buildings, 3 ambulances, 2 patrols, and 1 rescue unit. A California Office of Emergency Services engine is located at Ukiah Fire, which boasts an ISO rating of 3.

Personnel respond to 2300 calls per year, a large majority of them medical. Areas of special concern are Low Gap Park on the city's northwestern boundary and the new homes in the highly-flammable hills to the west of the valley. The department may be contacted at (707) 463-6274 or [ukiahfire@cityofukiah.com](mailto:ukiahfire@cityofukiah.com).

**UKIAH VALLEY FIRE DISTRICT**, under Chief Dan Grebil, responds to emergencies in 80 square miles outside the Ukiah city boundaries, including the valley floor and the surrounding hills which hold hundreds of homes scattered among heavy vegetative fuels. Seven paid staff and 26 volunteers serve 15,000 residents and respond to 1030 calls per year, of which about 3% are Local Responsibility Area wildfires. Medical calls are handled by 2 paramedics, 16 EMTs, and 5 First Responders. The district operates 5 engines, 2 rescue/support units, four utility vehicles, and a water tender – the newest addition being a brand new Type 3 wildland engine built to district specifications, their first new emergency response vehicle.

The district has two locations: a main station at the south end of town plus another at the north end, staffed primarily by CDF personnel during fire season. An excellent cooperative relationship exists with both CDF and the Ukiah Ambulance Service to provide a full complement of timely emergency response in the District. Areas of special wildfire concern in the District are the U.S. Army Corps of Engineers' Lake Mendocino recreational area, and BLM's Cow Mountain Recreation Area, both of which may see numerous fires each summer.

Additionally of concern are the populated Wildland-Urban Intermix areas of Greenfield Ranch, Orr Springs Road, Oak Knoll and Fircrest Drive, and Robinson Creek Road along the valley's western hills; and Redemeyer Road, Deerwood, El Dorado Estates, Vichy Springs, Vichy Hills, Rogina Heights, the City of 10,000 Buddhas, and Talmage in the eastern hills.



All these areas have severe ingress/egress problems. Further, the entire area *east* of the Russian River from Lake Mendocino south to Hopland is served by departments based *west* of the river, which could result in a cutoff of services during a major flood or earthquake. The District is currently seeking to establish a station in the Talmage area to close this gap. Chief Grebil and his staff may be reached at (707) 462-7921 or [uvfd@mcn.org](mailto:uvfd@mcn.org).

### **MUTUAL AID/ PLANNING ZONE 3**

**ANDERSON VALLEY FIRE DEPARTMENT**, headed by Chief Colin Wilson, is part of a Community Services District. The District covers 200 square miles and 4000 residents, and responds to about 300 calls per year, of which 20 are wildfires. Many responses are outside the district and unreimbursed. The 40 volunteer firefighters include 13 EMTs, two female captains, and a female battalion chief. The Chief is the only employee, and two volunteers staff the office. ISO ratings are 5 in downtown Boonville and 8 in most of the rest of the district. Equipment includes 14 engines, 2 rescue/ medical units, 2 water tenders, 1 utility, and 1 patrol stationed at 9 locations throughout the district.

Wildland-Urban Interface areas (WUIs) of special concern include Rancho Navarro and Holmes, Sky, Yorkville, and Nash Ranches. The fire department is working closely with MCFSC to develop contacts in the valley's 20-plus WUI communities (see Appendix B); and department staff regularly conduct public education programs with individual property owners and subdivisions. The department is very proactive in encouraging development of private or community water supplies for fire suppression. The MCFSC's first vegetation management project, the Little Mill Creek Sheltered Fuel Break, is located at the north end of the district; a description of that project is given in the Battalion 5 report in Chapter 3. The department may be reached at (707) 895-2020 or [avvfd@pacific.net](mailto:avvfd@pacific.net).

**ELK VOLUNTEER FIRE DEPARTMENT**, headed by Chief Jeff Roy, is located on the coast near the intersection of Highway 1 and the Philo-Greenwood Road and boasts 21 volunteers, including 7 EMTs. The average age of these dedicated volunteers is 50 years, and their average length of service in the department is 10 years. Department apparatus is 5 engines, 2 rescue units, and one BLS ambulance, stationed at 5 locations. About 80% of the department's funding comes from a property tax assessment on the district's 50 square miles and 400 residents, and the balance comes from fundraisers and donations.

Many volunteers work in towns outside the district, so the need is great for more persons available during the week. The ambulance successfully bills only about 5 transports a year, and reimbursement for providing mutual aid is rare. The District includes two state parks and much difficult terrain. Of the department's 70 calls a year, about 5% are to wildfires. The department recently successfully retained their ISO ratings of 7 in the town of Elk and 9 in the outlying areas. Chief Roy may be reached at (707) 877-3558 or [jeffroy@mcn.org](mailto:jeffroy@mcn.org).



**REDWOOD COAST FIRE PROTECTION DISTRICT**, led by Chief Mike Suddith, serves approximately 170 square miles on and near the coast. The district is currently working with the county's Local Agency Formation Commission (LAFCO) to annex the Irish Beach fire district just to the north, and has already taken over that district's functions. Fifteen volunteers include 2 paramedics, 9 EMTs, and 4 First Responders; and the chief receives a part-time salary for administrative duties. Two Type 1 engines, 2 Type 2s, 1 Type 3, 2 rescue units, and one water tender make up the fleet and are located at two stations: one in Manchester and one in the City of Point Arena, to whose 500 residents the district provides emergency services. The ISO rating is 8 in Point Arena and Irish Beach where there are hydrants, and 9 in outlying areas.

The department responds to an average of 180 calls per year, 145 of which are medical in nature, and provides automatic aid to the South Coast Fire District. The area has an average of 10 wildfires per season. Of special fire concern are the area's state beaches and parks and all the district's ridges, which have not seen fire in 30 to 40 years and are "primed to burn." Chief Suddith may be contacted at (707) 882-1833 or [suddith@usa.net](mailto:suddith@usa.net).

**SOUTH COAST FIRE PROTECTION DISTRICT**, headed by Chief Leighton Nelsen, is located at the far southwest corner of the county and includes approximately 25 square miles. Its sphere of influence extends 14 miles out Fish Rock Road to the east – an area that was the center of attention in late August 2005 when a fire in 100 acres of heavy commercial timber attracted several air tankers and heavy helicopters plus a large quantity of ground resources. The district's equipment is based at stations in Gualala, Anchor Bay, Iversen Ridge, and Ocean Ridge, and includes 3 Type 1 engines, 3 Type 3 engines, and 3 water tenders.

Of 22 volunteers, 3 are young Explorers who train and serve along with their parents. Seven volunteers are EMTs and 15 are certified First Responders. Medical aid calls, which account for 80% of the district's 185 calls per year, provide mutual aid to the Coast Life Support District, which has a training center in Gualala and serves the south coast round the clock. Three to four special trainings per year plus bi-weekly evening trainings keep district volunteers up to date on their skills. The lack of defensible space around homes is a major concern, as is the region's change from old growth redwood and fir forests to trees and vegetation that are much more flammable, including pine forests now dying because they have reached maturity. Chief Nelsen and his firefighters may be reached at (707) 884-4700 or [leighton@mcn.org](mailto:leighton@mcn.org).

The **GREENWOOD RIDGE** area inland of Elk is home to a volunteer fire company which owns heavy equipment for fire suppression. This company is headed by Chief Robert Beacon, who may be reached at (707) 877-3311 or [GWR7200@ISP.com](mailto:GWR7200@ISP.com).



**MUTUAL AID/PLANNING ZONE 4**

**ALBION-LITTLE RIVER FIRE DEPARTMENT**, headed by Chief Oliver Seeler, is a nonprofit corporation operating in conjunction with the Albion-Little River Fire Protection District. The district, which has no paid staff, includes 44 beautiful square miles on the central coast and protects 3000 permanent residents and typically another 3000 visitors. Of their 21 volunteers, 8 are EMTs; in fact, this district was the first on the coast to provide EMT services. Their 9 response vehicles placed at 5 locations respond to just under 200 calls a year, of which typically about 8 are wildfires. The District's ISO Insurance ratings are 8 and 7, and its personnel work diligently to maintain them.

Response to wildfires is extremely aggressive -- and must be -- because the closest CDF resource is outside the district, at the Woodlands station east of Mendocino. The department is proud of their record of keeping wildfires small pending the arrival of other resources, and is in great need of funding and equipment to continue providing this response: their one wildfire response engine was recently retired because of safety problems. Areas of concern regarding wildfire and other safety issues include Paul Dimmick State Park eight miles inland, the Navarro Headlands, and The Woods, a retirement community bordering Van Damme State Park, which is heavily loaded with untreated wildland fuels. The department may be contacted at (707) 937-0888 or [info@albionfire.com](mailto:info@albionfire.com).

**COMPTCHE VOLUNTEER FIRE DEPARTMENT**, headed by Chief Larry Tunzi, is a small tax district of 50 square miles and 600 residents located nine miles inland of the town of Mendocino. An additional 100 residents in the sphere of influence receive round-the-clock services free of charge. Sixteen volunteers, several of whom are women, respond to 40 calls a year, 10% of them wildfires. Twelve volunteers are First Responders and 2 are EMTs. Equipment includes 3 engines, 2 rescue/medical units, and 2 water tenders at one station. The District's ISO rating is an 8.

Comptche faces two situations common to most departments in the county's rural areas. 1) Most volunteers work in towns outside the district, causing a need for more volunteers available during the week. 2) Increasing regulations and costs are a burden on the department and make the job of volunteer firefighters a difficult one. But they continue to serve their community. Chief Tunzi and his team may be reached at (707) 937-0728 or [comptchefire@pacific.net](mailto:comptchefire@pacific.net).

**FORT BRAGG FIRE DEPARTMENT** operates under a Joint Powers Agreement between the City of Fort Bragg and the surrounding Fire District. Four paid staff are Chief Steve Orsi, Fire Marshal Steve Wells, a secretary, and a maintenance person. Chief Orsi serves as a liaison between the California Office of Emergency Services (OES) and local fire departments; and Steve Wells is Committee Chair of the County Fire Chiefs' Training Officers' section. Of the 40 volunteers plus 4 staff, 1 is a Paramedic, 25 are EMTs, and 16



are First Responders. Nine engines and one rescue unit are located at two stations: in downtown Fort Bragg, where the county's third Office of Emergency Services engine is located, and on Highway 20 to the east.

The department serves 75 square miles and approximately 15,000 residents. Call volume is 600 to 700 a year, a very small percentage of which are wildfires. Response without reimbursement is most often to traffic accidents on Highway 20. State parks and beaches in the response area are occasionally the site of cliff rescues. Several areas surrounding the city border on heavy timberlands. ISO ratings are 5 in the City and 8b in the rural areas. The "Steve and Steve" team may be reached at (707) 961-2831 or [fbfire@mcn.org](mailto:fbfire@mcn.org).

**MENDOCINO VOLUNTEER FIRE DEPARTMENT** is led by Chief Steve Schlafer and Fire Marshal Jeff Wall. The district covers both an historic coastal business district and numerous homes in WUI subdivisions and along roads surrounded by heavy vegetation. Public lands administered by State Parks and CalTrans are located inside the district boundaries, and these too contain high hazard fuels. A new fire station, the location of the central coast Fire Plan community meeting, recently replaced an old traditional station in this picturesque community.

The department has 31 volunteers responding to about 250 calls per year, 80% of which are medical calls and traffic accidents. Cliff and boat rescues are frequent, and the department has two inflatable boats, two kayaks, and two jet skis for this work. ISO ratings are 9 for commercial properties and 8 for residential. The lower ratings are due to the lack of a public water system and hydrants in Mendocino; however, two large tenders carry water to fires. Chief Schlafer and his team may be reached at (707) 937-0131 or [mvfd@mcn.org](mailto:mvfd@mcn.org).

**WESTPORT VOLUNTEER FIRE DEPARTMENT**, under Chief Beck Regalia and Assistant Chief David Doriot, is the story of a fire department figuratively risen from the ashes. Problems had plagued the department for years, and a complete reorganization was begun in early 2005. Coached and trained by CDF Battalion Chief Jim Davis, the Westport Volunteer Fire Department has been revitalized by 18 firefighters, most of them new to the world of emergency response. Davis and the firefighters have devoted a huge amount of time to fire and medical training – 5 are now EMTs and 6 are First Responders -- as well as refurbishing the fire station and building a new apparatus bay. In June Chief Davis handed the baton to Regalia and Doriot following a Department election.

The Westport department is the only one in the county with no authority to levy taxes to support its work. It is formally organized under the Westport County Water District but receives no funding from it. Further, 90% of its responses are to areas outside the water district boundaries, and the department receives no reimbursement for calls. At the Fire Safe Council community meeting on May 4, establishment of a fire district was the top priority.



Two engines, 1 rescue unit, and 1 water tender respond to 50 calls per year, of which 4-6 are wildfires, serving 50-60 residents inside the district and an additional 300 in their 100-square-mile sphere of influence. Of special concern are the Westport Beach RV Campground with 175 spaces, and Westport Union Landing State Park with 100 spaces, both of which are usually full in the summer; plus the Sinkyone Wilderness Area to the north. Many homes are scattered on the fire-prone hills outside of town, and a subdivision north of town is growing rapidly. Most houses are on single access roads, do not have adequate defensible space, and are not near adequate water supply for fire suppression. The Chief and Assistant Chief may be reached at (707) 964-3254 or 964-5135, or [cheezhdnv@cs.com](mailto:cheezhdnv@cs.com).

## **THE CHIEFS' CONCERNS**

On February 28, 2005, the Mendocino County Board of Supervisors hosted a workshop during which local fire chiefs expressed their departments' needs. Supervisor Hal Wagenet had initiated planning for this workshop several months earlier, before becoming a Director of the MCFSC, due to his concern about the demise of some local volunteer fire departments and the shrinking number of volunteers in others.

The main issues facing local fire departments were identified as follows:

- Diminishing numbers of younger, able-bodied volunteer firefighters available in rural areas due to two main causes: a) skyrocketing housing costs which prohibit younger families from purchasing or even renting homes in rural areas, and b) lack of employment in the same areas. A case in point is the Leggett and Piercy area, many of whose younger adults commute north to Humboldt County to work and are not available to respond in northern Mendocino County during the daytime.
- Ever-increasing laws and regulations imposed upon local fire departments by the state legislature and other governmental entities. The most sweeping and difficult of these in recent years were imposed by Senate Bill 1207 (Romero, 2001), which requires, among other things, that volunteer firefighters undergo the same level of training as paid firefighters. This legislation, apparently well-intentioned for safety purposes, in essence requires volunteer firefighters to be in training all weekend, every weekend, without pay. This is, of course, impossible for men and women who have families and fulltime employment. The heightened requirements and liability resulting from such unfunded mandates have demoralized and embittered some local volunteer fire chiefs nearly to the point of resigning.
- Lack of funds to replace aging and obsolete equipment necessary for both firefighter safety and effective fire suppression. Many departments are dependent on grants from the federal Assistance to Firefighters program for the purchase of fire engines, protective gear, and other costly equipment. In the past the Mendocino Emergency

Services Authority (County OES) was very pro-active in obtaining grant funding for radios and other equipment for emergency services agencies, but that office is not currently active. Departments fortunate enough to receive grants for fire engines still face the requirement to raise 10% to 25% of the total amount as a “match.”

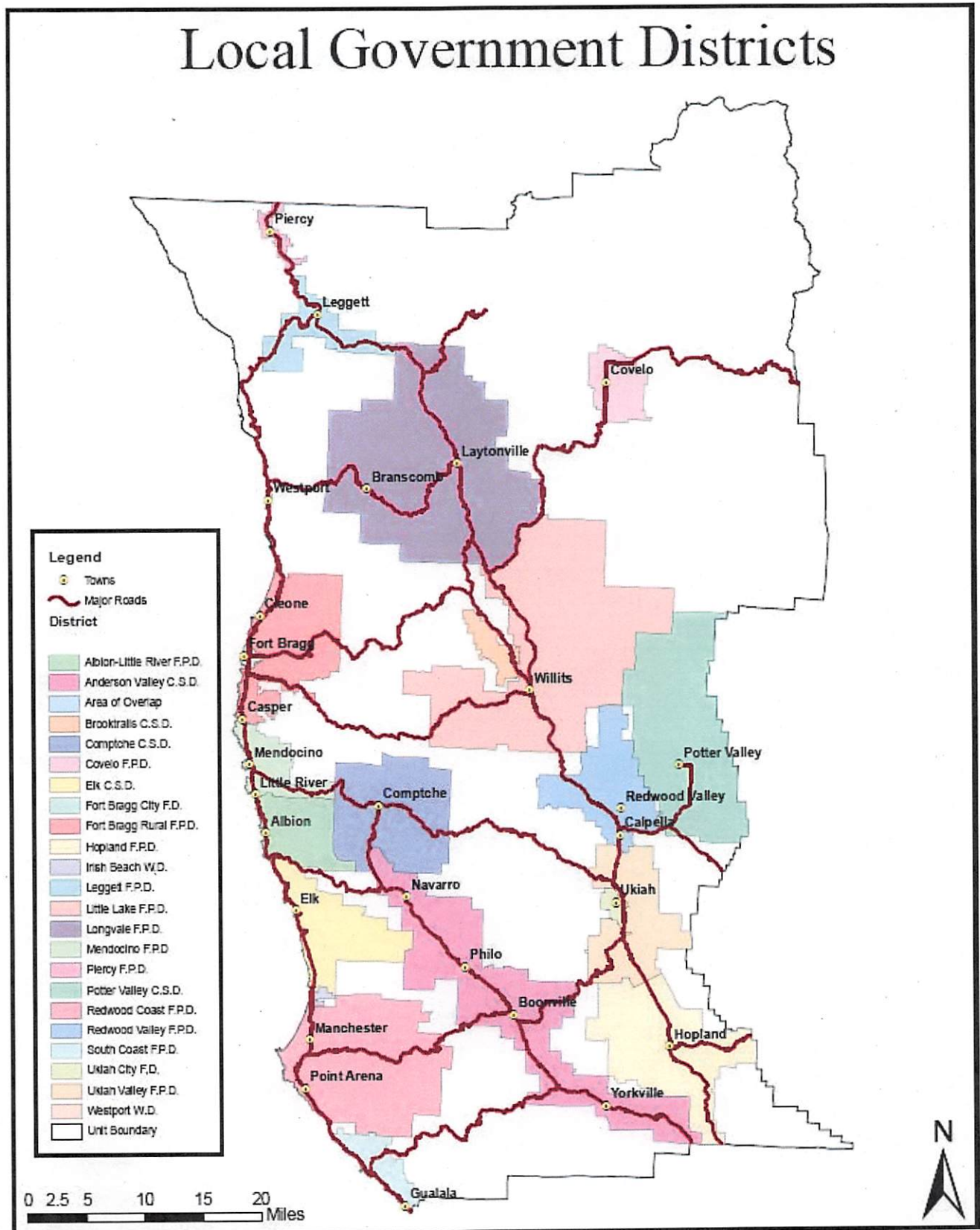
- A large number of emergency calls for which costs are not recovered. These are primarily of two kinds, about which details were given above:
  - a) Traffic collisions involving non-residents. Highways 101, 20, 253, 128, and Highway 1 on the coast all see numerous traffic accidents per month. As these roads are major arteries for tourists, a good percentage of their accidents involve persons from out of county; and response costs of local fire agencies may not be recoverable.
  - b) Calls to fires and medical aids outside of taxing districts. Local fire personnel routinely respond to emergency calls outside of their districts – and outside of any district -- from a sense of duty. Such services are essentially provided free of charge.
- The requirement of all special districts to complete Municipal Service Reviews every five years. These MSR's require time and the payment of fees beyond the capability of most rural fire districts. But if no current MSR exists, no development whatsoever may be allowed in the district. Frank McMichael of the Mendocino County Local Agency Formation Commission (LAFCO) is working with the districts to reduce these costs as much as possible.

Following the workshop, a Task Force of local fire chiefs, plus Supervisors Hal Wagenet and Jim Wattenburger, was established to address these issues. Future versions of this Plan will report on the Task Force's progress.

In June 2005 the Mendocino County Grand Jury issued a report on seven rural fire districts in the county. Their findings, remarkably similar to those identified in this chapter, may be found at [www.co.mendocino.ca.us/grandjury/pdf/SevenFireDistricts.6.22.5.pdf](http://www.co.mendocino.ca.us/grandjury/pdf/SevenFireDistricts.6.22.5.pdf).



# Local Government Districts



## CHAPTER 3

### *California Department of Forestry and Fire Protection*

#### MENDOCINO UNIT

#### WILDFIRE MANAGEMENT PLAN 2005





## **PART ONE: THE OVERALL PICTURE**

### **MENDOCINO UNIT EXECUTIVE SUMMARY**

The California Department of Forestry and Fire Protection's Mendocino Unit consists of 2,361,560 acres, and CDF provides direct protection for 2,244,450 acres, 28,145 of which are in southern Trinity County. With the exception of the four incorporated cities of Ukiah, Fort Bragg, Willits, and Point Arena, and small areas of Local Responsibility Area (LRA) lands within Mendocino County, CDF maintains statutory responsibility for all wildland fires. Of the total county population, about 59,000 or 67% live on State Responsibility Area (SRA) lands. Population growth will impact SRA lands because of the build-out character of LRA lands.

The Unit's Administrative Headquarters are located at Howard Forest, a complex of buildings on Highway 101 south of Willits. The complex is home to Resource Protection, a Logistics Service Center, Training Center, two automotive fleet maintenance shops, and a breathing apparatus maintenance facility. It also houses the Emergency Command Center, which provides fire, rescue, and medical dispatching services on a contractual basis for most of the County. The Unit's Prevention Bureau includes a Pre-Fire Engineer, arson investigation team, and Fire Prevention Specialist, who also serves as Public Information Officer. The Battalion 2 fire station and Howard Forest Helitack Base at this location support various Howard Forest functions.

### **WILDFIRE SUPPRESSION RESOURCES**

The Unit is geographically divided into six battalions whose boundaries are similar to the Mutual Aid Zones described in Chapter 2. Suppression resources during fire season include 128 career personnel and another 100 seasonal personnel, on duty around the clock, staffing 10 fire stations, 16 engines, 4 bulldozers, and other equipment. A typical engine company consists of one Captain or Fire Apparatus Engineer and two or three firefighters. In addition, ten 15-man California Department of Corrections crews, housed at the Chamberlain Creek and Parlin Fork Camps in Jackson Demonstration State Forest, provide hand line construction, mop-up, and post-fire patrols.

A 10-person Helitack Base located at Howard Forest is the home of Copter 101, a Bell UH-1H "Super Huey" which serves multiple purposes, the primary of which is initial attack on wildfires. Copter 101 carries a pilot, two captains, 5-6 firefighters -- and a 324-gallon collapsible Bambi bucket. Full deployment of the helicopter involves dropping off one captain and the firefighters at the fire scene, attaching the bucket for dipping from the nearest accessible water supply and, obviously, applying water to the fire.

The Unit also boasts the Ukiah Air Attack Base which provides 7-day coverage during the daylight hours of fire season. Tankers 90 and 91 are Grumman S2T turboprop aircraft, each with a capacity of 1,200 gallons of fire retardant. Air Attack 110, the Unit's North American Rockwell turboprop OV-10 command plane, carries its pilot and the Air Attack battalion chief or captain who coordinates aerial suppression activities from an orbit above the fire. The base, located inland in the hot and dry Ukiah Valley, has the advantage of rarely being impacted by fog, unlike its neighboring bases in Rohnerville and Santa Rosa, which are quite subject to coastal weather influences.

All Unit aircraft provide rapid initial attack and are especially valuable in the county's remote areas where steep terrain and narrow, winding roads greatly increase ground response times. In such situations, aircraft are often at scene and applying water or retardant before engines and dozers arrive, cooling the fire and giving ground resources a great boost. Aircraft also provide "eyes in the sky" for those on the ground, noting spot fires and giving other direction from their vantage point. Additional eyes are provided by the Mendocino County Cooperative Aerial Fire Patrol, which for 55 years has supplied a small aircraft to fly over the county and look for "smokes" during late summer and early fall afternoons. CDF works very closely with the Patrol and provides direction to its pilot. A description of the Patrol's work is given in Appendix E.

CDF dispatch levels during fire season are affected primarily by weather conditions. During a period of high dispatch, any fire in or threatening wildland vegetation causes immediate dispatch of the command aircraft, both air tankers, one helicopter, five engines, two dozers, and two hand crews. Local fire department resources, as detailed in Chapter 2, respond according to their locations, frequently assisting each other across district boundaries.

## **WILDFIRE PREVENTION EFFORTS**

The Wildland-Urban Interface presents major concerns for fire prevention. Many homes are located in hazardous locations either in ignorance of, or in disregard for, fire prevention practices. Strict enforcement of California Public Resources Codes 4290 and 4291 will be necessary to correct the errors of past residential and commercial developments. Fire loss reductions must be gained through better fire safe planning, with participation by all political bodies and stakeholders.

The Fire Prevention Program of the CDF Mendocino Unit, including the Fire Prevention Bureau, Vegetation Management Program, and Pre-Fire Engineering, attempts to address the actual problems encountered and to plan for anticipated changes. Certain areas of the Unit have been designated, including existing and new wildland subdivisions, where wildland fires cannot be afforded. Those areas receive targeted efforts commensurate with the need; details on these projects are in the Battalion reports.

Unit prevention efforts include fair exhibits, permit procedures, fire patrols, news media releases, a yearly wildfire newspaper supplement, public service announcements, structure and dooryard

premise inspections, and membership in both the County Fire Prevention Officers' Association and the Mendocino County Fire Safe Council. Fire prevention programs are coordinated to the greatest extent possible with local fire departments. In the past year CDF and the Fire Safe Council have begun joint educational and project efforts as well. All these efforts are increasing residents' awareness of potential wildfire problems and resulting in positive changes.

Each area of the Mendocino Unit, to a greater or lesser extent, will need to adapt to the ever-increasing population moving into and recreating in the wildland areas of the County, posing greater risks of fires and even greater expectations for all CDF response services. Through development, implementation, and ongoing reassessment of this Plan's priorities, the Mendocino Unit will be ready and steadfast in its ability to provide leadership in pre-fire management planning and in protecting the citizens of Mendocino County from destructive wildfires.

***Loyde Johnson***  
Chief, Mendocino Unit

## **CDF FIRE MANAGEMENT PLANNING PROCESS OVERVIEW**

The California Department of Forestry & Fire Protection has initiated a state-wide pre-fire management initiative to reduce wildland fires and the costs of suppressing them. This initiative includes a systematic application of risk assessment, fire safety, fire prevention, and fire hazard reduction techniques. The goal of the initiative is to identify -- for state, federal, and local officials, and the public -- those areas within the State Responsibility Areas that are high priorities in terms of assets at risk and have a high probability of large wildfires, with associated costs and losses. Identifying these will allow public and government decision-makers to focus on what can be done to develop wildfire protection zones and reduce costs and losses in these areas. The end product of this CDF initiative is the California Fire Plan, completed in 1995 and currently being revised. The Mendocino Unit Wildfire Management Plan uses the same processes that the state Fire Plan uses to develop a working plan. These processes include the following GIS overlays:

- Ignition Workload Assessment: identifies areas with the potential of experiencing unacceptable loss and high suppression cost fires.
- Assets at Risk: identifies public and private assets that the wildland fire protection system is created and funded to protect.
- Fire History: identifies areas with the potential for severe fires, by vegetation type and geographical area.
- Severe Fire Weather: identifies higher risk areas in terms of probability of fires occurring during periods of severe fire weather.

This information is used to produce a Unit map that identifies high-risk / high-value areas where wildfires are most likely to become high-cost and high-loss conflagrations. Once the GIS information is validated by field personnel, the process of identifying pre-fire management projects is accomplished through input from the field Battalion Chiefs, Fire Prevention Battalion Chief, Pre-Fire Engineer, Vegetation Management Coordinator, Unit management staff, plus local fire departments, Fire Safe Councils, and the public.

The assumption used in developing this Pre-Fire Management Unit Plan is that a proposed pre-fire project will reduce costs and losses during periods of severe fire weather, which is when most of California's wildfire costs and losses occur. Once a pre-fire management project is accomplished, a large fire burning in that specific high-risk /high-value area would be contained at a smaller size, burn with lower temperatures and severity, incur significantly reduced suppression costs, and result in substantially lower levels of losses.

Before and during implementation of the Unit fire plan, stakeholders' input is sought in order to:

- Acquaint stakeholders with the process
- Bring their expertise and knowledge to bear on assets-at-risk maps, which identify areas of high, medium, and low risk
- Review the levels of service in these locations
- Identify areas where the stakeholders consider levels of risk unacceptable

This has been done. The CDF Battalion Reports in this chapter list Mendocino County stakeholders' concerns, ideas, values, and perceptions of assets at risk, as gained through the Fire Safe Council's community meetings. Chapter 2's description of local fire departments and this chapter's battalion reports describe the levels of fire suppression service throughout the county.

## **CALIFORNIA FIRE PLAN GOALS AND OBJECTIVES**

The overall goal of the California Fire Plan is to reduce total costs and losses from wildland fires in California by protecting assets at risk through focused pre-fire management prescriptions and increased initial attack success. The California Fire Plan has five strategic objectives:

- To create wildfire protection zones that reduce the risks to citizens and firefighters
- To assess all wildlands, not just State Responsibility Areas. Analysis will include all wildland fire service providers: federal, state, local, and private. The analysis will identify high-risk / high-value areas, and determine who is responsible, who is responding, and who is paying for fire emergencies.

- To identify and analyze key policy issues and develop recommendations for changes in public policy. Analyses will include alternatives which will reduce total costs and losses by increasing fire protection system effectiveness.
- To have a strong fiscal policy, to focus and monitor the wildland fire protection system in fiscal terms. This will include all public and private expenditures and economic losses.
- To translate the analyses into public policies.

## **CALIFORNIA FIRE PLAN FRAMEWORK**

Five major components form the basis of an ongoing CDF fire planning process to monitor and assess California's wildland fire environment.

- Creation of wildfire protection zones that reduce risks to citizens and firefighters.
- Initial attack success. The California Fire Plan defines an assessment protection system for wildland fire. This measure can be used to assess CDF's ability to provide an equal level of protection to lands of similar type, as required by California Public Resources Code Section 4130. This measurement is the percentage of fires that are successfully controlled before unacceptable costs are incurred.
- Assets protected. The California Fire Plan establishes a methodology for defining assets protected and their degree of risk from wildfire. The assets addressed in the Plan are citizen and firefighter safety, watersheds and water, timber, wildlife and habitat (including rare and endangered species), unique areas (scenic, cultural, and historic), recreation, range, structures, and air quality. Stakeholders (national, state, local, and private agencies, interest groups, etc.) will be identified for each asset at risk. The assessment will define the areas where assets are at risk, enabling fire service managers and stakeholders to set priorities for pre-fire management project work.
- Pre-fire management. This aspect focuses on system analysis methods that assess alternatives used to protect assets from unacceptable risk of wildland fire damage. Projects include a combination of fuels reduction, ignition management, fire safe engineering activities, and improved forest health. The priorities for projects will be based on the input and support of asset owners and other stakeholders. Pre-fire management prescriptions designed to protect these assets will also identify who benefits and who should share in the project costs.
- Fiscal framework. The California Board of Forestry and CDF are developing a fiscal framework for assessing and monitoring annual and long term changes in California's wildland fire protection systems. Local, state, and federal wildland fire protection agencies, along with the private sector, have evolved into an interdependent system of pre-fire management and suppression forces. As a result, changes to budgeted levels of service of any of the entities directly affect the other entities and the services delivered to the public.



Monitoring system changes through this fiscal framework will allow the Board and CDF to address public policy issues that maximize the efficiency of local, state, and federal firefighting resources.

These are the California Fire Plan framework applications:

- Identify for federal, state, and local officials, and for the public, those areas of concentrated assets and high risk.
- Allow CDF to create a more efficient fire protection system focused on meaningful solutions for identified problem areas.
- Give citizens an opportunity to identify public and private assets and to help design and carry out projects to protect those assets.
- Identify, before fires start, where cost-effective pre-fire management investments can be made to reduce taxpayer costs and citizen losses from wildfire.
- Encourage an integrated inter-governmental approach to reducing costs and losses.
- Enable policy makers and the public to focus on how to reduce future costs and losses.

## **FUELS, WEATHER, TOPOGRAPHY, AND OTHER FACTORS**

This part of the Unit Plan identifies and analyzes fuels ranking (including topographic considerations), severe fire weather, assets at risk, large fire history, causes of ignitions, and initial attack success rates, the latter being an indication of the level of service the Unit has provided to the public. Analysis is accomplished by considering the data depicted on the attached maps along with the input of Stakeholders who often have detailed personal knowledge of local hazardous situations. Further information about assets at risk is contained later in this Plan.

Much of the data depicted on the maps is assembled by a land area unit dubbed a “quad 81<sup>st</sup>.” Each U.S. Geological Survey 7.5-minute quad map was divided into a 9 x 9 grid, forming 81 equal area blocks of land. Each block or quad 81<sup>st</sup> contains approximately 450 acres. On such maps, fires and other data are notated as being in the center of the quad 81<sup>st</sup> in which they occurred, rather than in their precise location.

### **FUELS RANKING: TYPE AND TOPOGRAPHY**

The fuels assessment layer explains much of the local situation and can help focus attention on solutions. Wildland vegetative fuels are the basic catalysts that support the combustion process in wildfires. The various fuels in the Mendocino Unit have been categorized into models, each of which has specific burning characteristics.

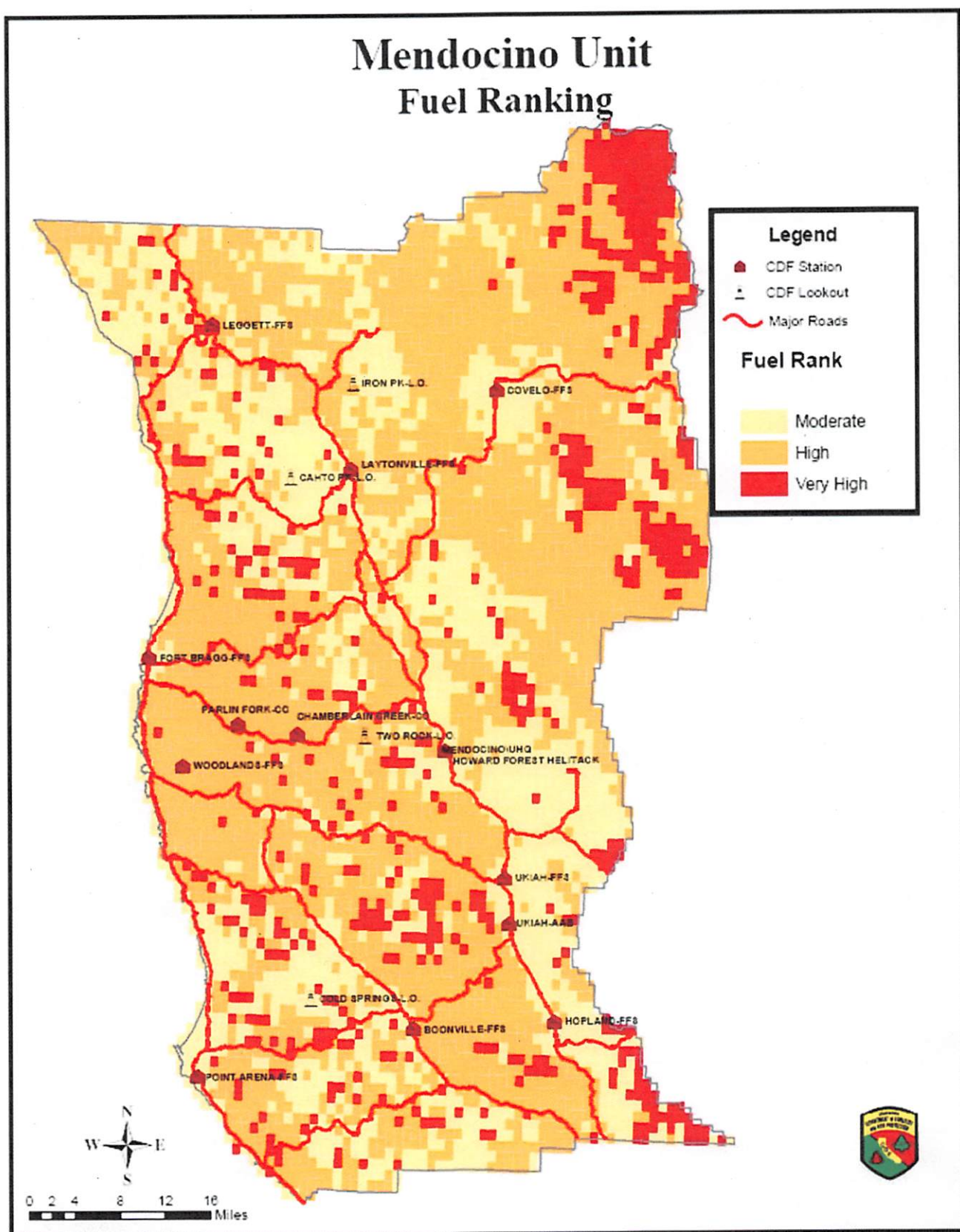
The initial fuel rank assessment is based on the fuel model and slope. Slope is divided into six classes using the National Fire Danger System slope classes. The ranking is then raised



based on the amount of ladder and/or crown fuel. This is called surface rank. By combining surface rank with the ladder index and crown index, a total score for fuel ranking is derived and classified as Moderate, High, or Very High.



Topography is an important element in this ranking, and plays a critical role in mountainous Mendocino County, where canyons, chimneys, draws, saddles, and other terrain features add to erratic winds and fire behavior. Gaps in mountain ranges funnel winds into valleys, especially in the mid to late afternoon, when fire danger is already at its highest due to high temperatures and low humidity. Experienced local firefighters know these patterns and areas and have learned to respond accordingly. Unfortunately, new residents are largely ignorant of them and continue to build homes at the tops of chimneys and along narrow canyons.



## **SEVERE WEATHER ASSESSMENT**

Fire behavior is dramatically influenced by weather conditions. Large costly fires are frequently, though not always, associated with severe fire weather conditions. Severe fire weather is typified by high temperatures, low humidity, and strong surface winds.

The California Fire Plan's weather assessment considers different climates of California, from fog-shrouded coastal plains to hot and dry interior valleys to cooler windy mountains. Each of these local climates experiences a different frequency of weather events that lead to severe fire behavior. The Plan's weather assessment uses a Fire Weather Index (FWI) developed by U.S. Forest Service researchers at the Riverside Fire Lab. This index combines air temperature, relative humidity, and wind speed into a single value index. This index can be calculated from hourly weather readings such as those collected in the California Remote Automatic Weather Station (RAWS) data collection system. The FWI does not include fuel moistures or fuel models, and it includes topography only to the extent that the RAWS weather readings are influenced by local topography.

The Mendocino Unit added a RAWS in the Laytonville area in October 2002. Once enough historical weather information has been collected, the Laytonville RAWS data will be added to the Unit's severe weather assessment.

Severe fire weather is defined using the Fire Weather Index developed by the Riverside Fire Lab. The FWI combines air temperature, relative humidity, and wind speed into a one number score. This gives wildland fire managers an index that indicates relative changes in fire behavior due to the weather; fuel and topography conditions are not included in the calculation. Severe fire weather occurs when the FWI, calculated from the hourly weather measurement, exceeds a predetermined threshold. The threshold FWI is derived from average bad fire weather of (approximately) 95° F, 20% relative humidity, and a 7 mph eye-level wind speed. Frequency of Severe Fire Weather is defined as the percent of time during the budgeted fire season that the weather station records severe fire weather. Individual weather stations are ranked as low, medium, or high frequency of severe fire weather. This ranking can then be applied to the area on the ground represented by the weather station.

The following chart contains Fire Weather Index information for each Remote Automated Weather Station used in the Mendocino Unit's Severe Fire Weather Assessment. The Laytonville RAWS is included in the chart for reference, but is not yet used in the assessment.

*Remote Automated Weather Station  
Catalog Information*

FWI CUTOFF	START LOW RANK	START MEDIUM RANK	START HIGH RANK
29.7250	0	5	20

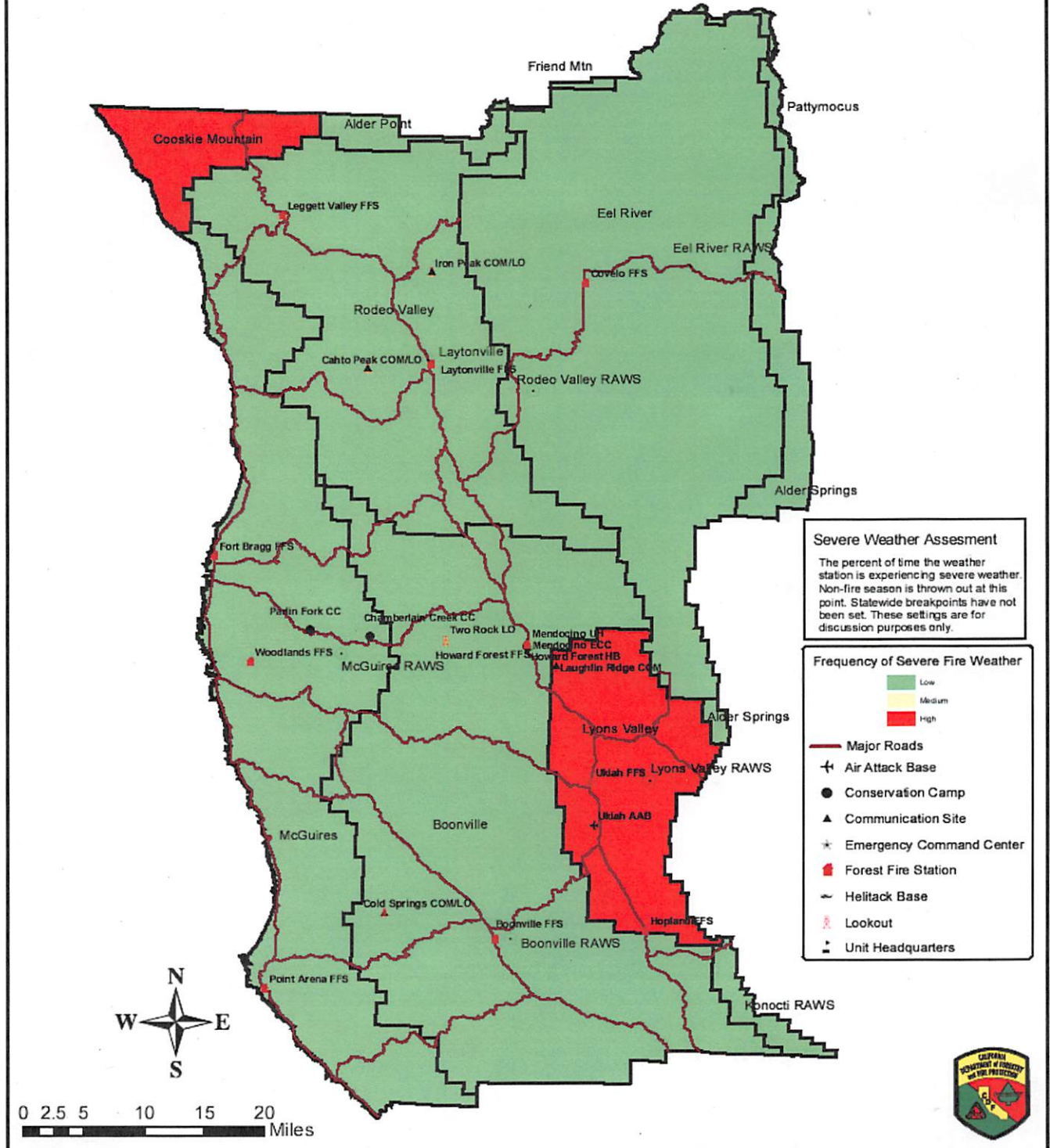
RAWS_ID	R_DPA_ID	NAME	OWNER	ELEVATION	COUNTWX	WXINSEAS	SEVEREWX	WXSCORE	WXRANK
ALD	HUU	Alder Point	CDF	923	66581	29106	64	.22	L
BNV	MEU	Boonville	CDF	840	71843	30726	297	.97	L
CSM	HUU	Cooskie Mountain	BLM	2950	58711	25182	5437	21.59	H
EEL	MEU	Eel River	USFS	1500	94924	40337	478	1.19	L
KNC	LNU	Konocti	CDF	2100	74096	42584	1784	4.19	L
LAY	MEU	Laytonville	CDF	1838	22470	8759	0	.00	L
LYO	LNU	Lyons Valley	BLM	3200	71852	31533	6866	21.77	H
RDO	MEU	Rodeo Valley	CDF	2425	86746	40473	476	1.18	L
PMC	TGU	Pattymocus	USFS	3889	62537	28014	69	.25	L

(see map on next page)



# Mendocino Unit

## Severe Fire Weather



## **HISTORY OF LARGE FIRES**

The following page contains a map of most of the large fires in the Mendocino Unit since 1922. This information can aid in understanding the potential for a large fire at any particular location and also help in determining areas where pre-fire management plans can be put to the best use. One thing this fire history makes clear is that, although the County has been spared large fires in the recent past, this Unit can and will sustain large, devastating wildfires. *Indeed, the lack of large fires for many years points to the likelihood of one or more happening in the near future.* To prepare and lower the risks now will benefit all stakeholders concerned.

(see map on next page)





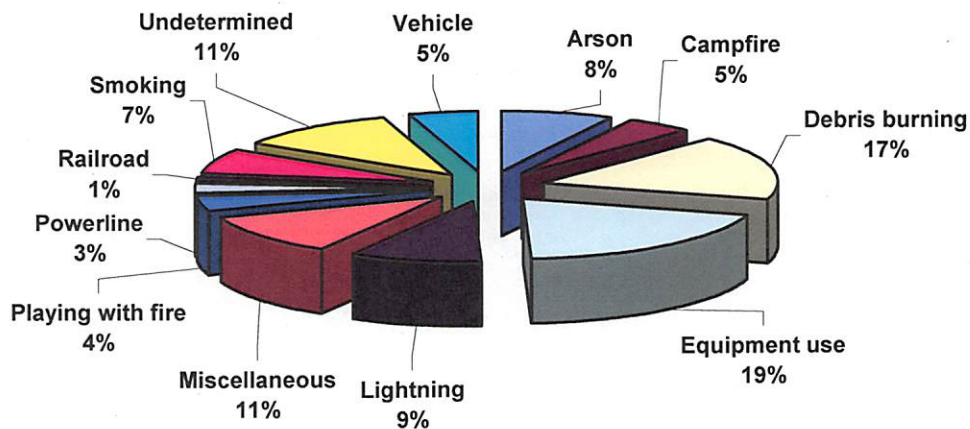
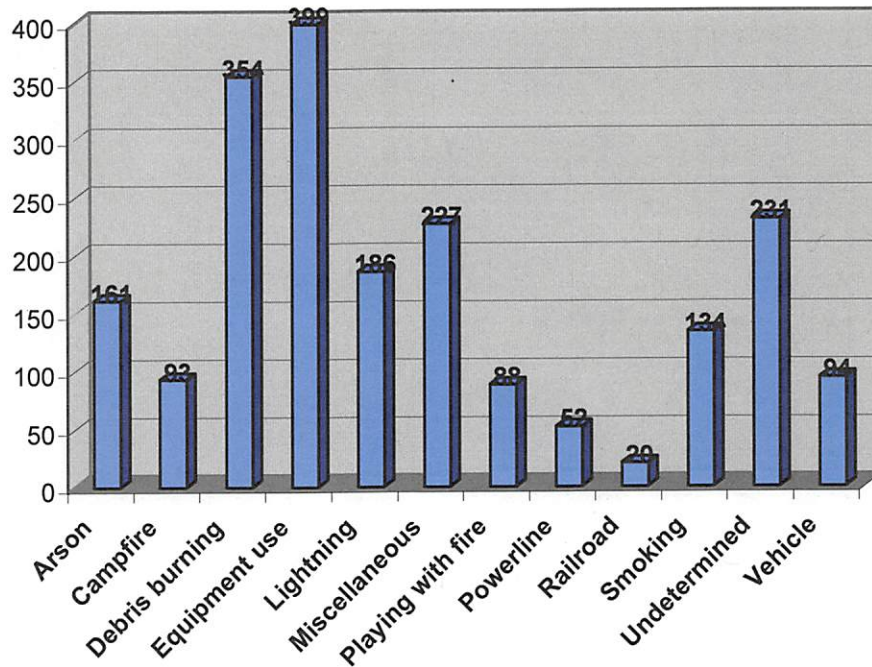
## **IGNITIONS AND INITIAL ATTACK SUCCESSES**

The largest single ignition cause in the Mendocino Unit during the last ten years has been the use of equipment, at 19% of all ignitions. Debris burning comes in next at 17%. The following charts show the number and causes of wildfires for 2004 and the previous ten years. Most ignitions are associated with roads and areas of population density. Identifying ignition causes is an ongoing challenge, including determining if roadside ignitions were accidental due to cigarette butts negligently tossed from vehicles or were acts of arson. Unit personnel are committed to meeting this challenge, because the need for accurate data to perform good analyses is crucial.

CDF Unit suppression forces, working side-by-side with local fire departments, have been quite successful in meeting the CDF goal of containing 95% of all wildfires at 10 acres or less. Every fire season, Mendocino County fire personnel, both paid and volunteer, receive numerous compliments and expressions of gratitude about their hard-hitting and effective initial attack and related successes – from persons whose homes were saved from destruction, community members who observe suppression efforts in progress, and many others. The coordinated effort of ground and air suppression resources has proven a winning combination for many years, and CDF and local fire personnel will work hard to maintain their good record and superb mutual aid relationships.

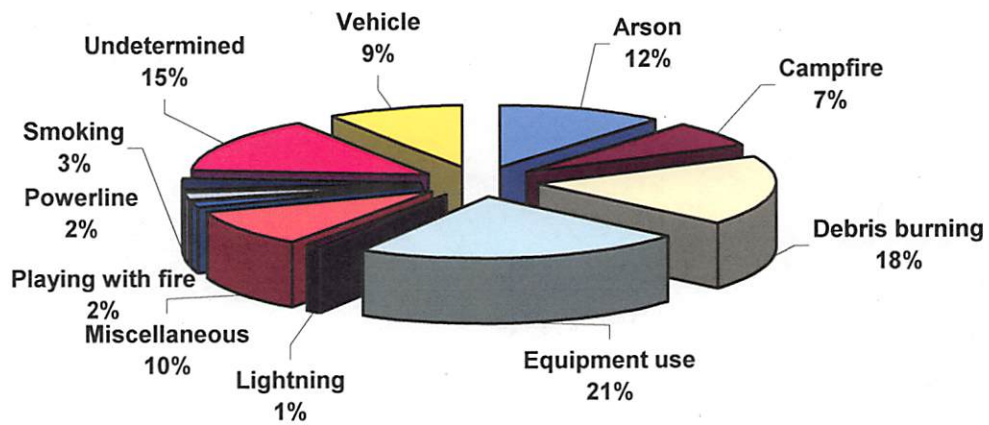
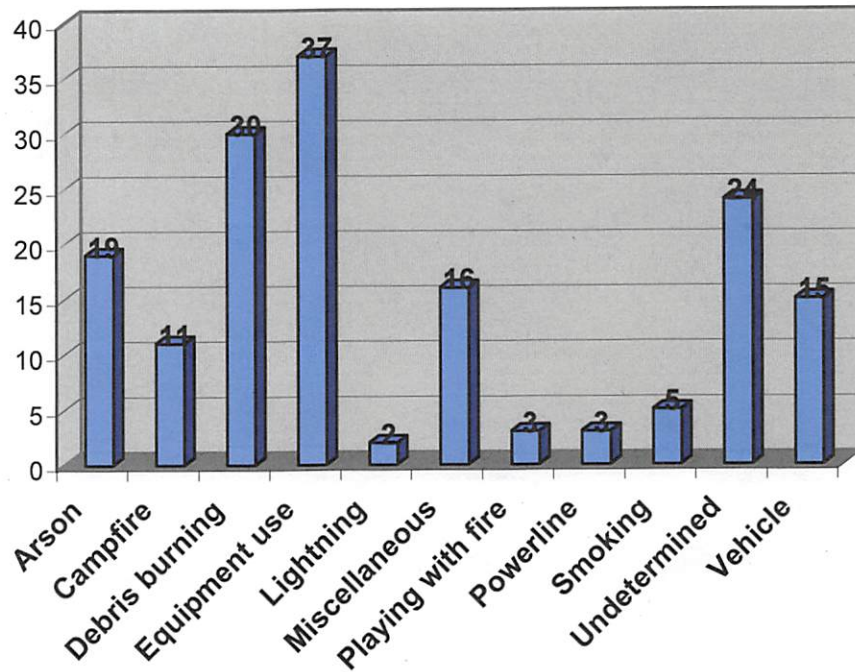
Wildfire successes are shown on the map entitled “Initial Attack Success.” Success or failure determination is generally based on both fire size and intensity, but if no information on intensity is available, only size is used.

# **Mendocino Unit** **Fire Cause 1995-2004** **Total Fires: 2040**





# **Mendocino Unit** **Fire Cause 2004** **Total Fires: 165**

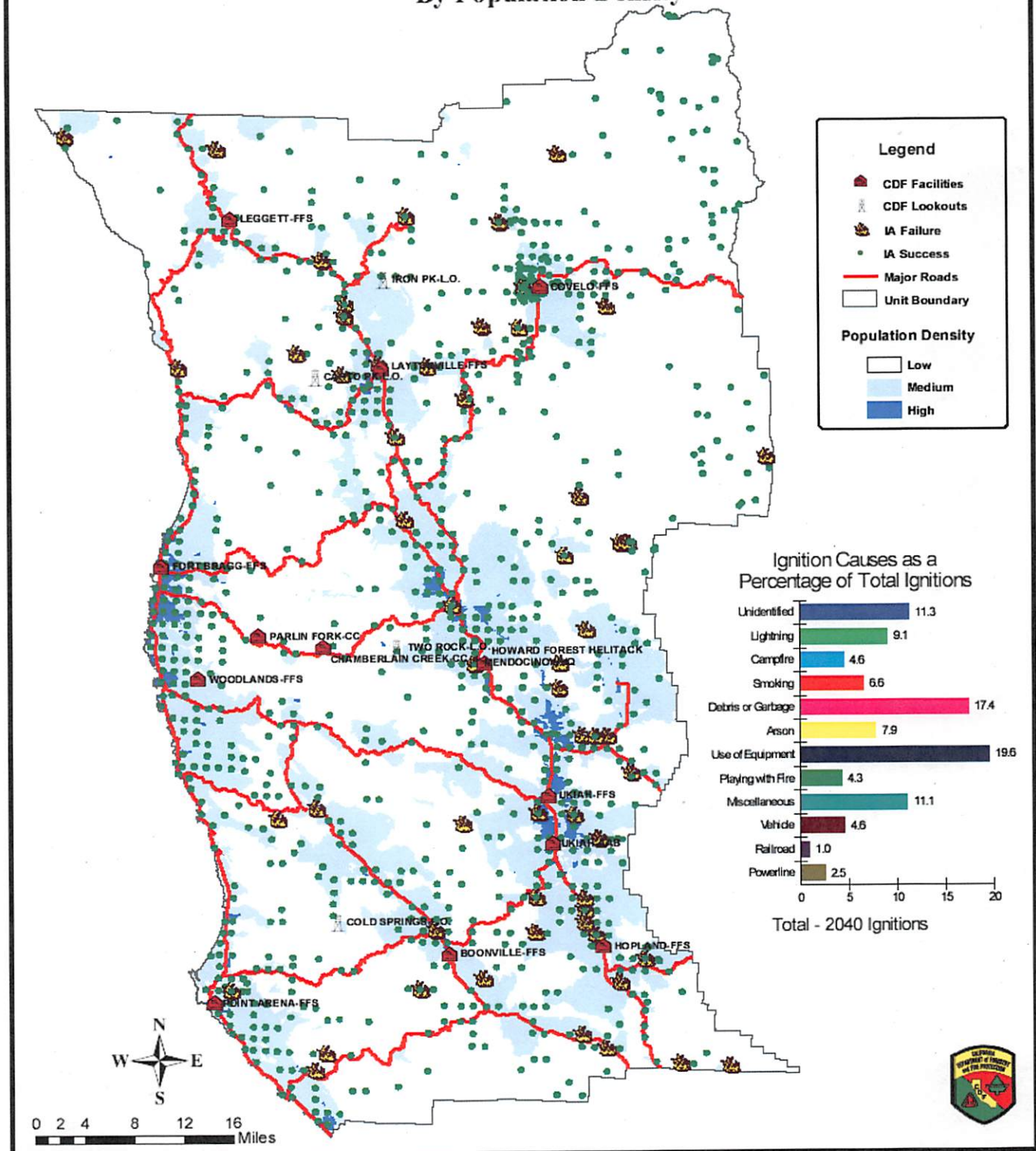




# Mendocino Unit

## Initial Attack Success-Failure 1994-2004

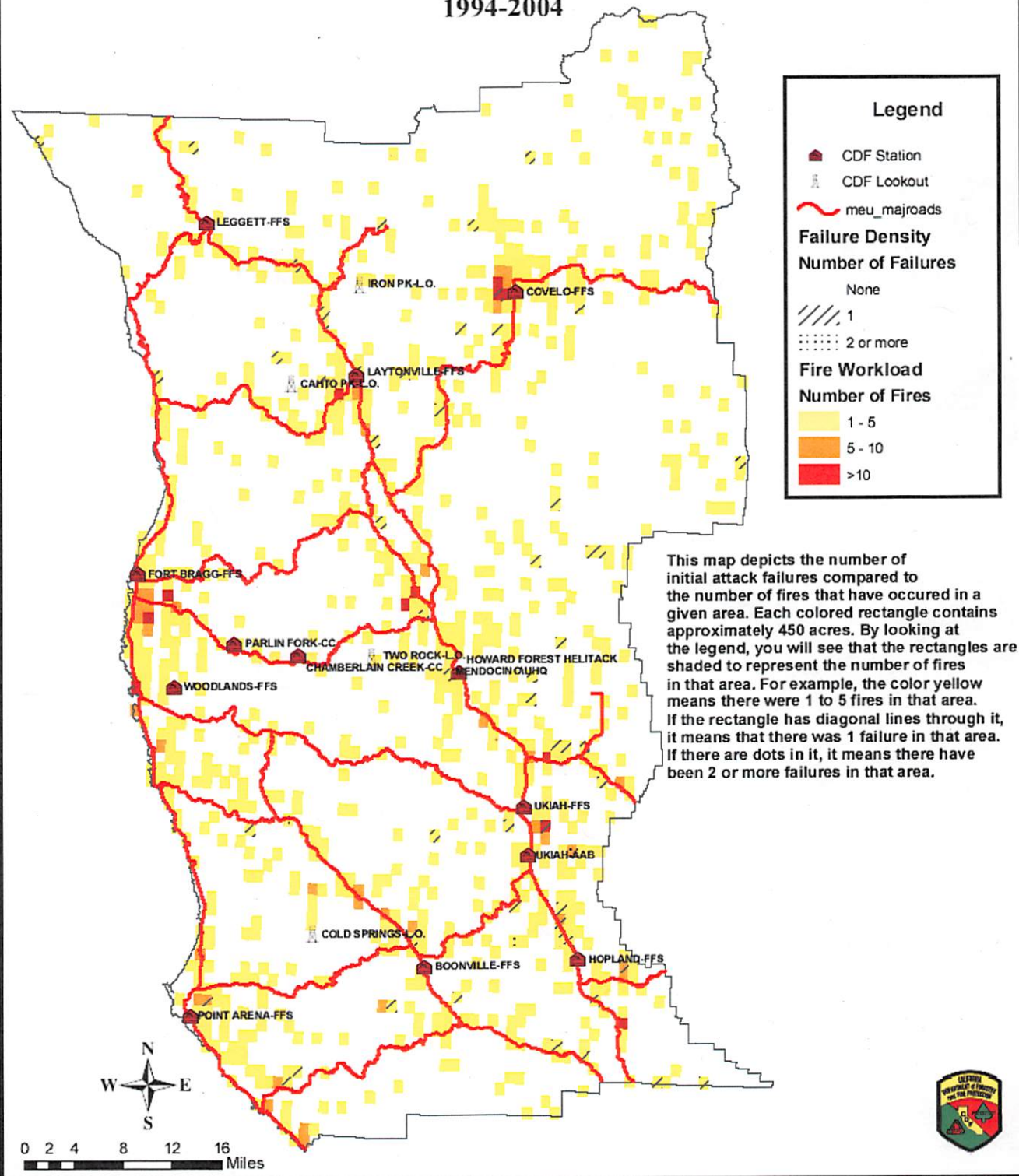
### By Population Density



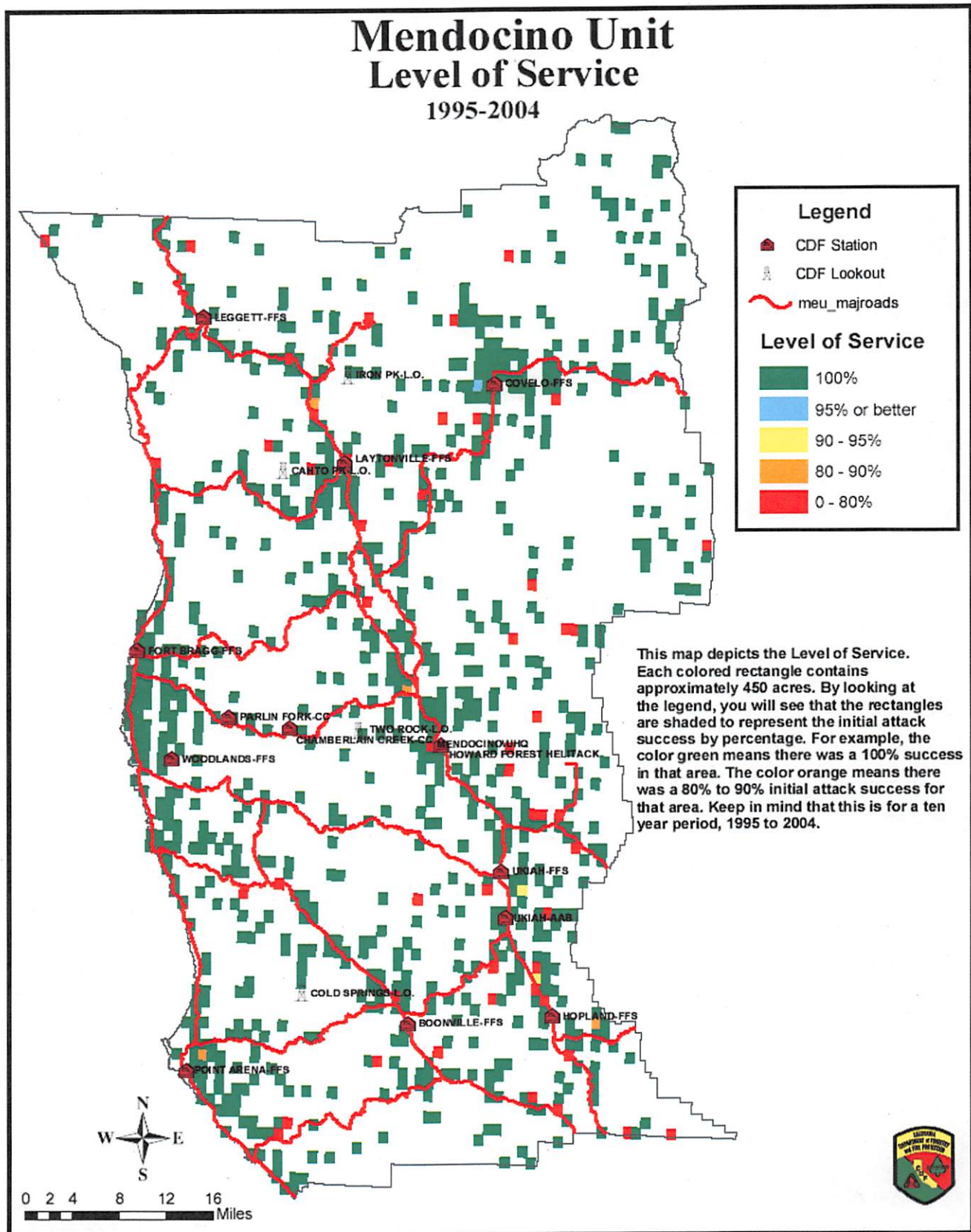
# Mendocino Unit

## Fire Workload and Failure Density

1994-2004





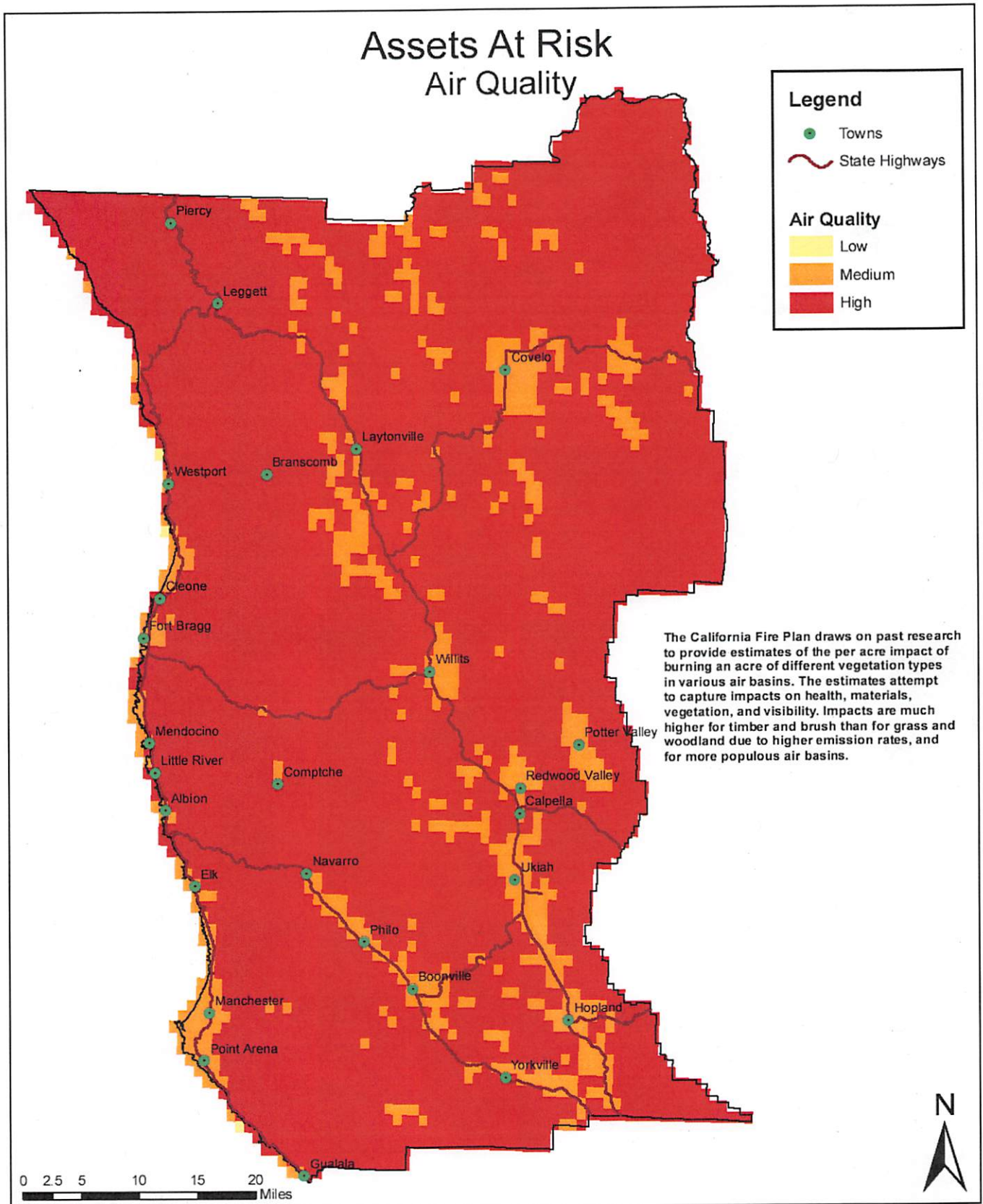


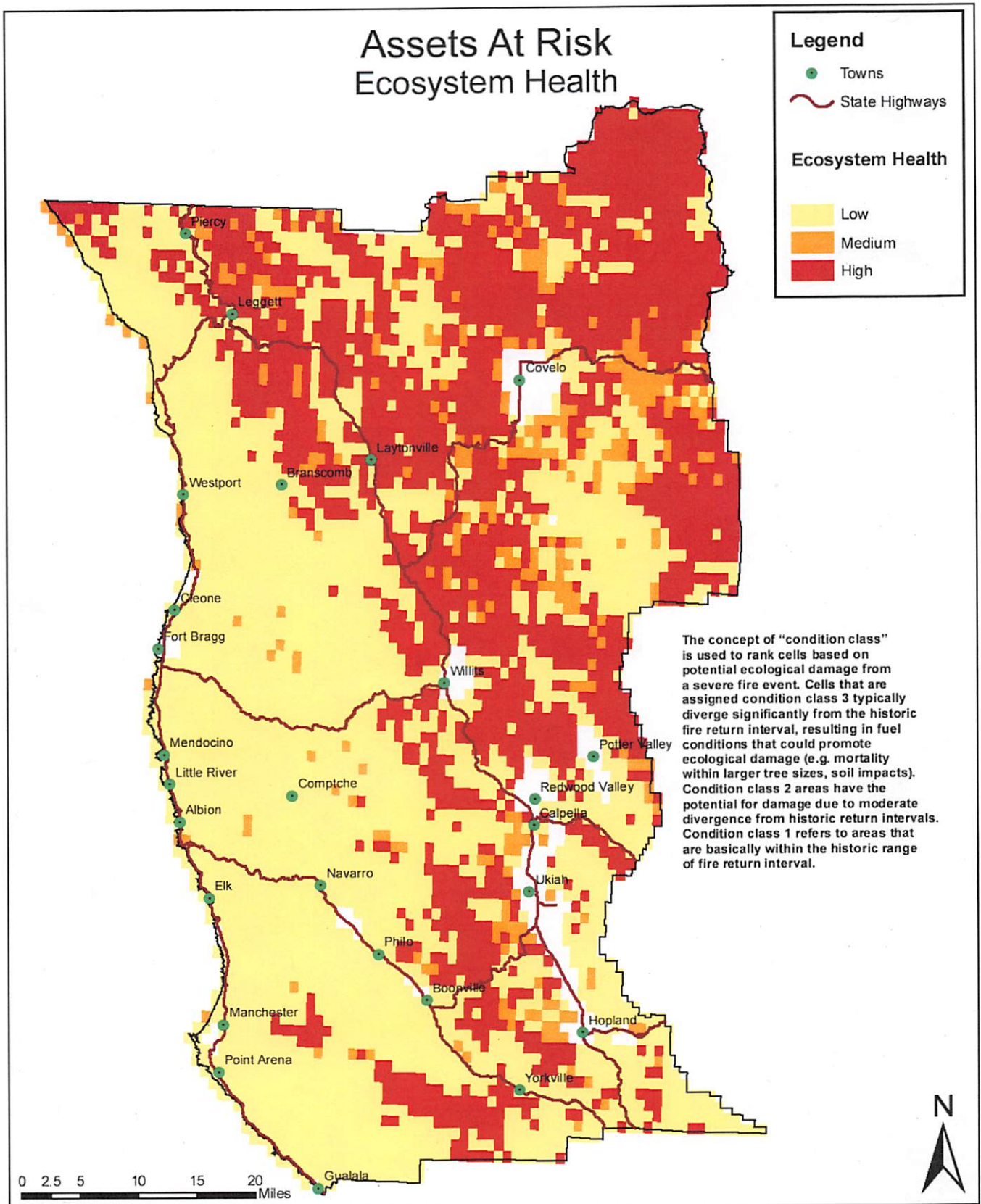


## ASSETS AT RISK

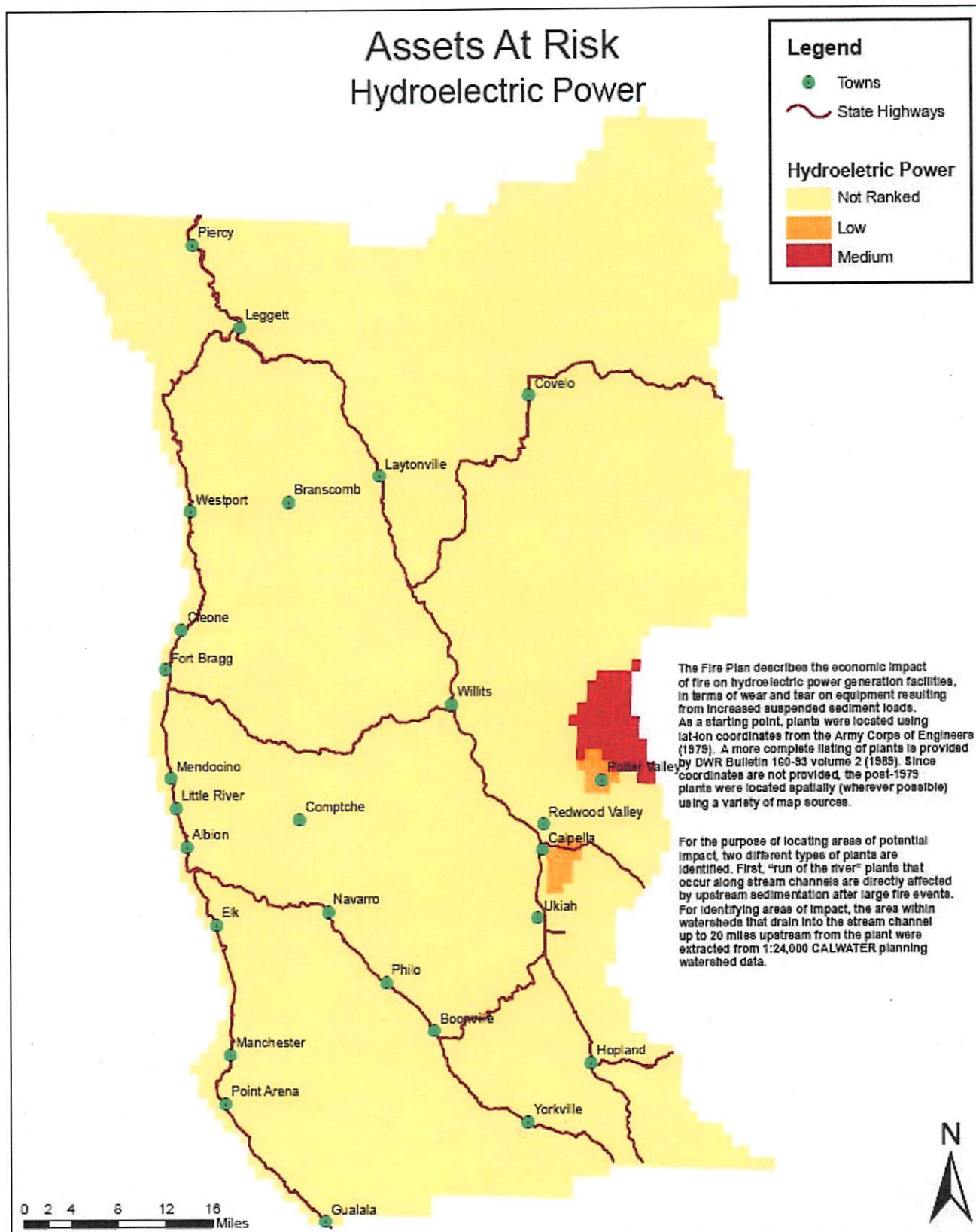
Mendocino Unit has a wide range of both natural and man-made assets at risk to wildfires. Fires threaten the natural environment as well as commercial and residential property. It is difficult to prioritize or rank these assets, but homes, infrastructure including water and power supply, rivers and watersheds, wildlife habit, recreation areas including tourist attractions, scenic beauty, timber, and rangeland all rank high in this Unit. The table below, from the California Fire Plan, describes categories of assets evaluated. The following maps show some of these assets. Further input from county residents is provided in Chapter 4.

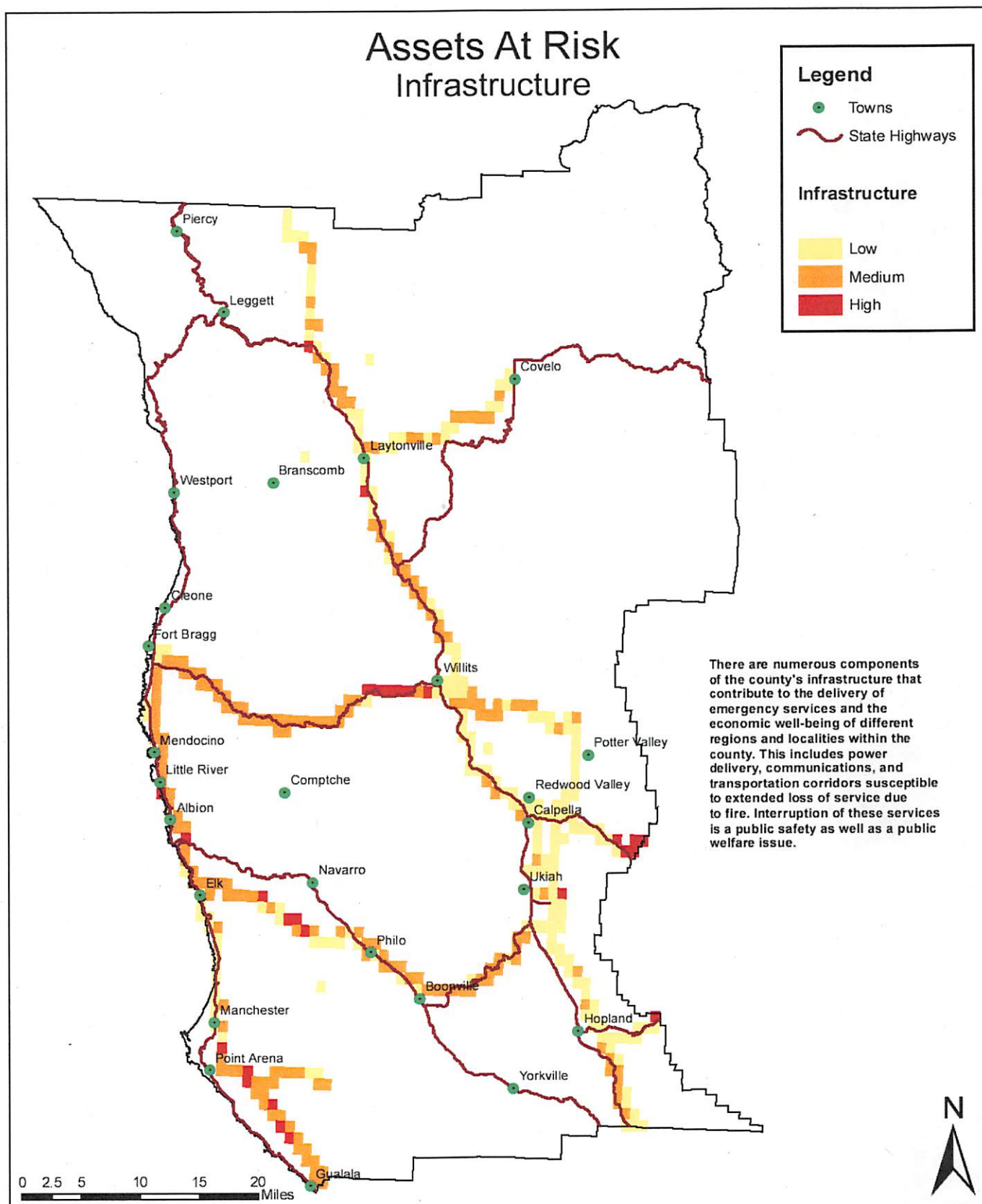
<b>Asset at Risk</b>	<b>Location and Ranking Methodology</b>
Hydroelectric power	1) Watersheds that feed run of the river power plants, ranked based on plant capacity; 2) cells adjacent to reservoir based plants; and 3) cells containing canals and flumes
Fire-flood watersheds	Watersheds with a history of problems or proper conditions for future problems (South Coastal Plain, field/stakeholder input), ranked based on affected downstream population
Soil erosion	Watersheds ranked based on erosion potential
Water storage	Watershed area up to 20 miles upstream from water storage facility, ranked based on water value and dead storage capacity of facility
Water supply	1) Watershed area up to 20 miles upstream from water supply facility; 2) grid cells containing domestic water diversions, ranked based on number of connections; and 3) cells containing ditches that contribute to the water supply system
Scenic views	Four mile viewshed around Scenic Highways and 1/4 mile viewshed around Wild and Scenic Rivers; ranked based on potential impacts to vegetation types (tree versus non-tree types)
Timber	Timberlands ranked based on value and susceptibility to damage
Range	Rangelands ranked based on potential replacement feed cost by region/owner/vegetation type
Air quality	Potential damage to health, materials, vegetation, and visibility; ranking based on vegetation type and air basin
Historic buildings	Historic buildings ranked based on fire susceptibility
Recreation	Unique recreation areas or areas with potential damage to facilities, ranked based on fire susceptibility
Structures	Ranking based on housing density and fire susceptibility
Non-game wildlife	Critical habitats and species locations based on input from California Department of Fish & Game and other stakeholders
Game wildlife	Critical habitats and species locations based on input from CA DF&G and other stakeholders
Infrastructure	Infrastructure for delivery of emergency and other critical services (e.g. repeater sites, power transmission lines)
Ecosystem Health	Ranked based on vegetation type/fuel characteristics

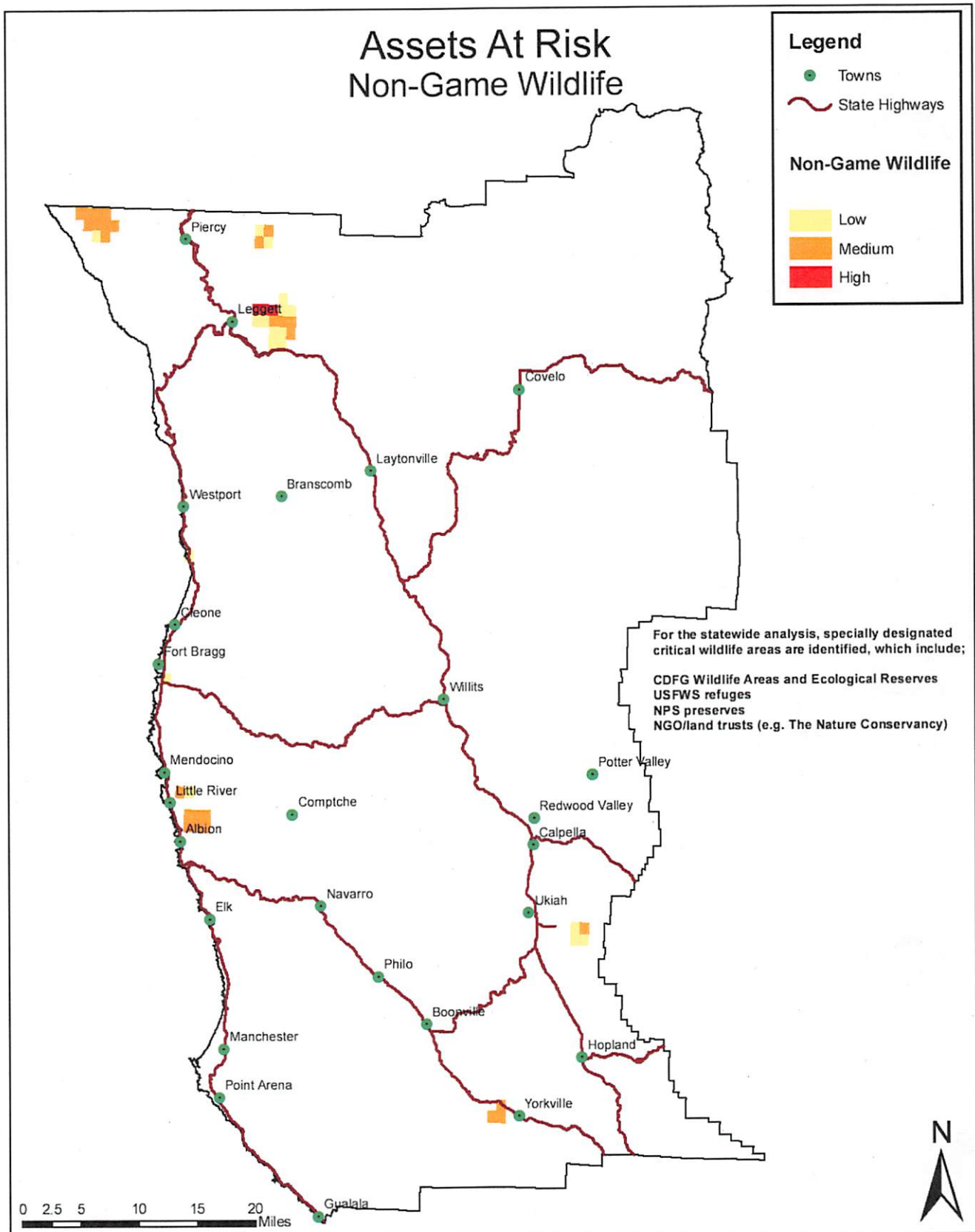




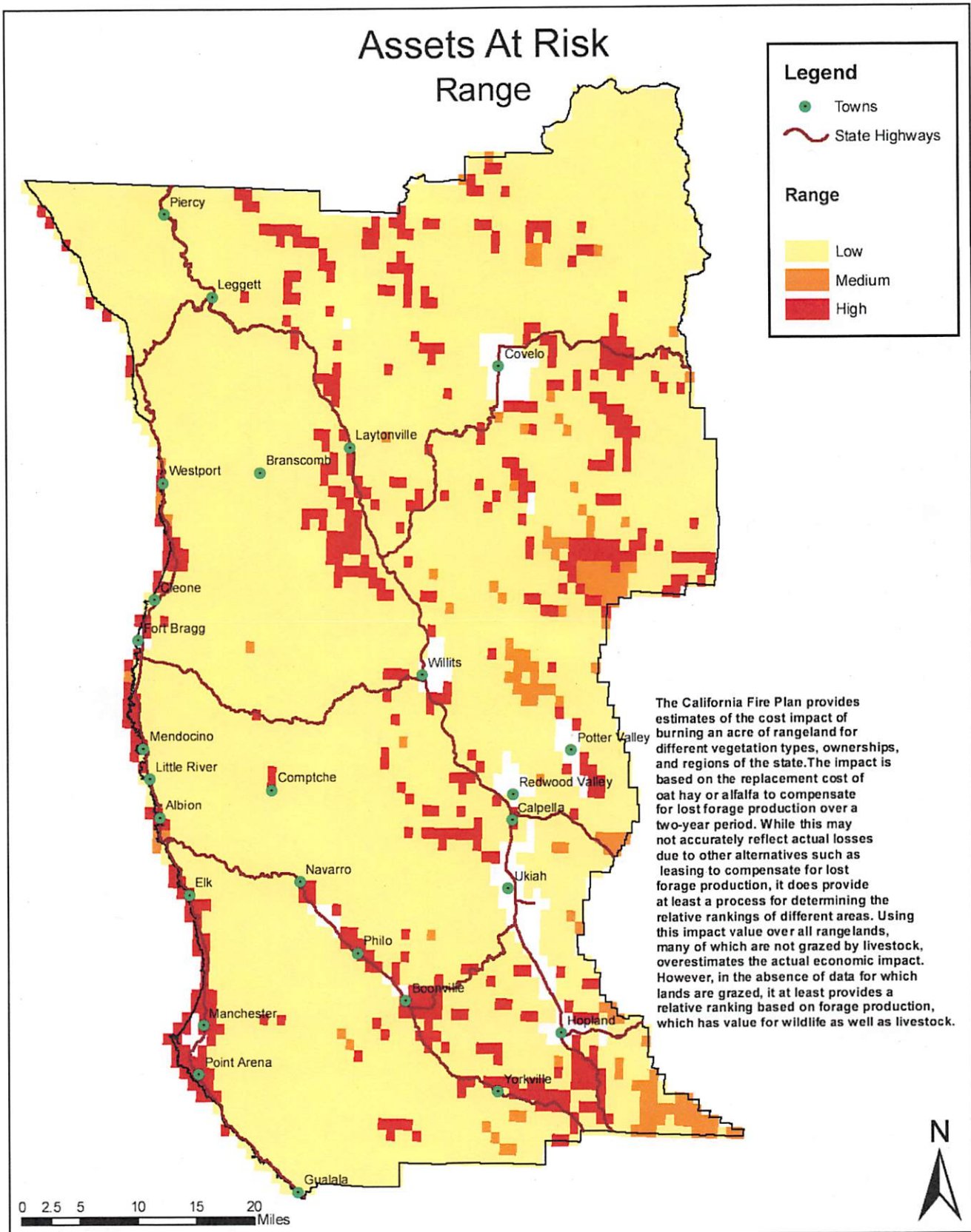


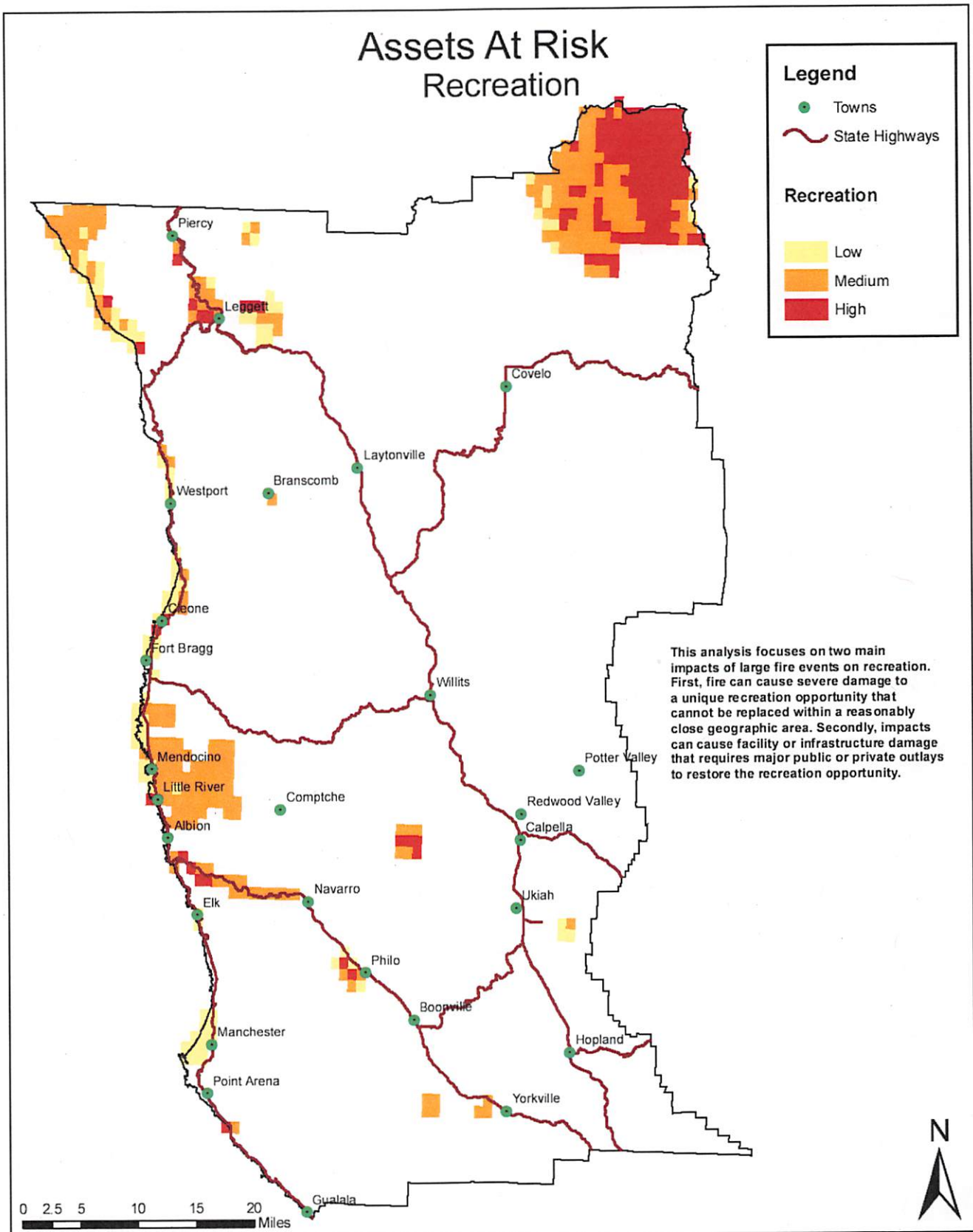


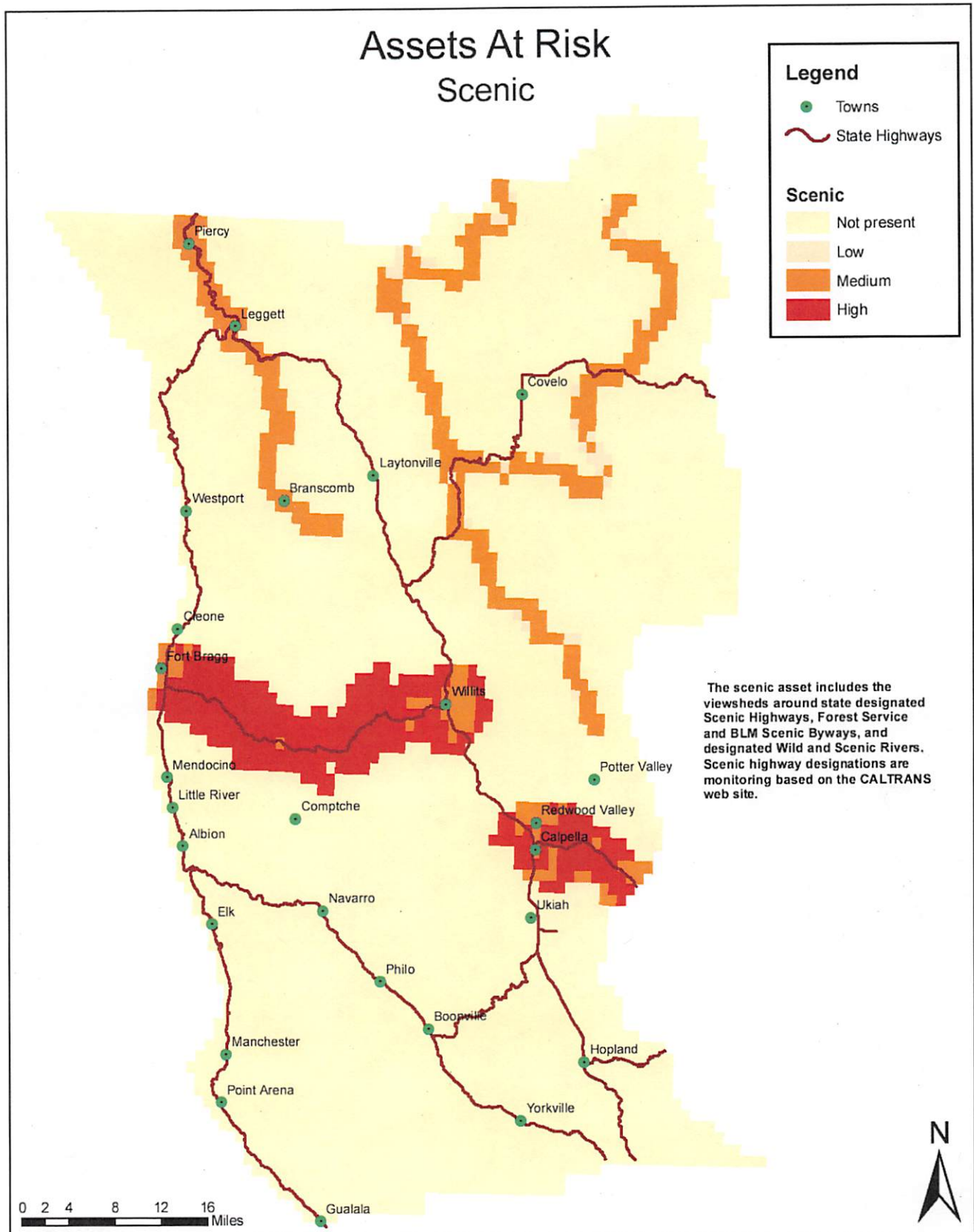




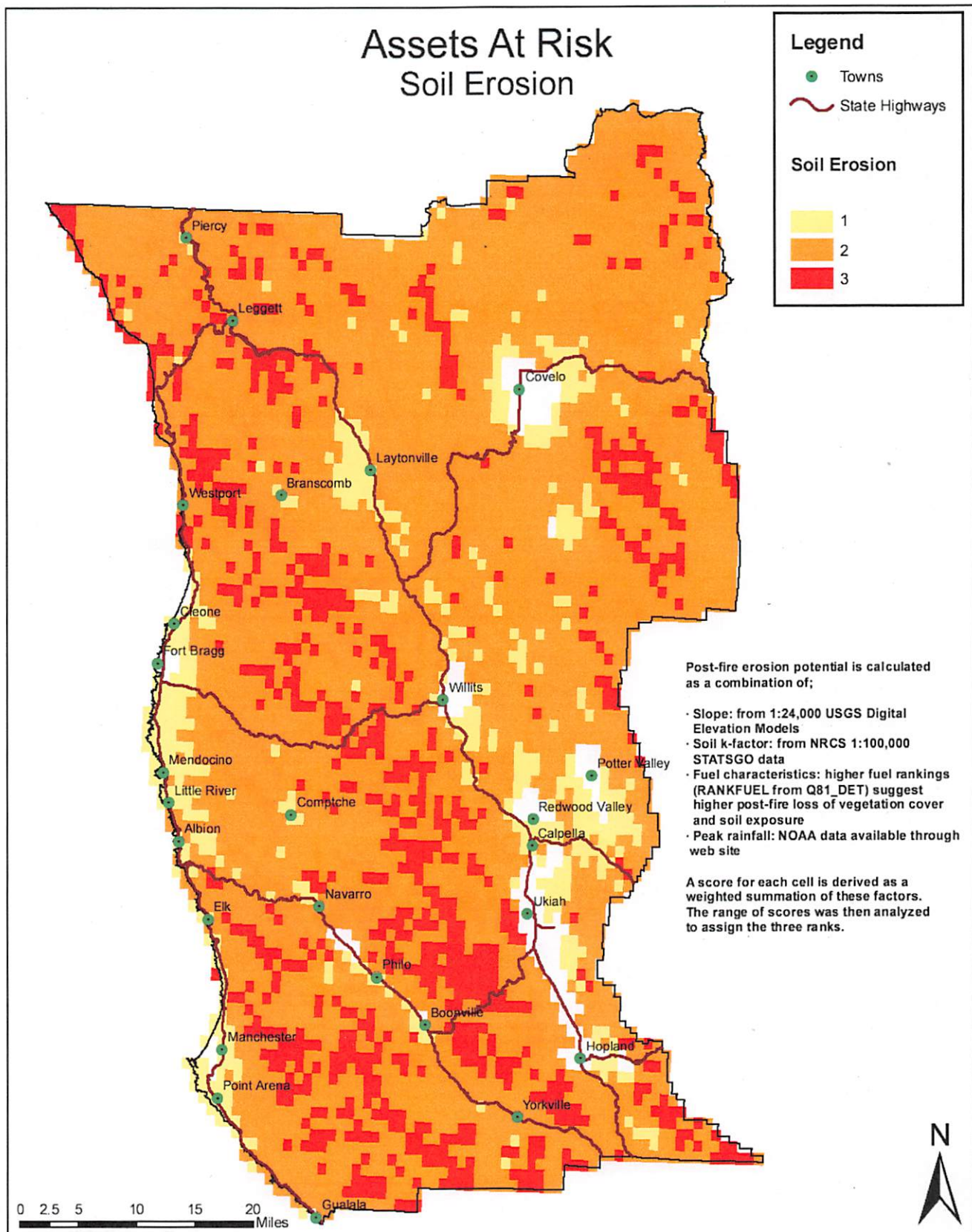


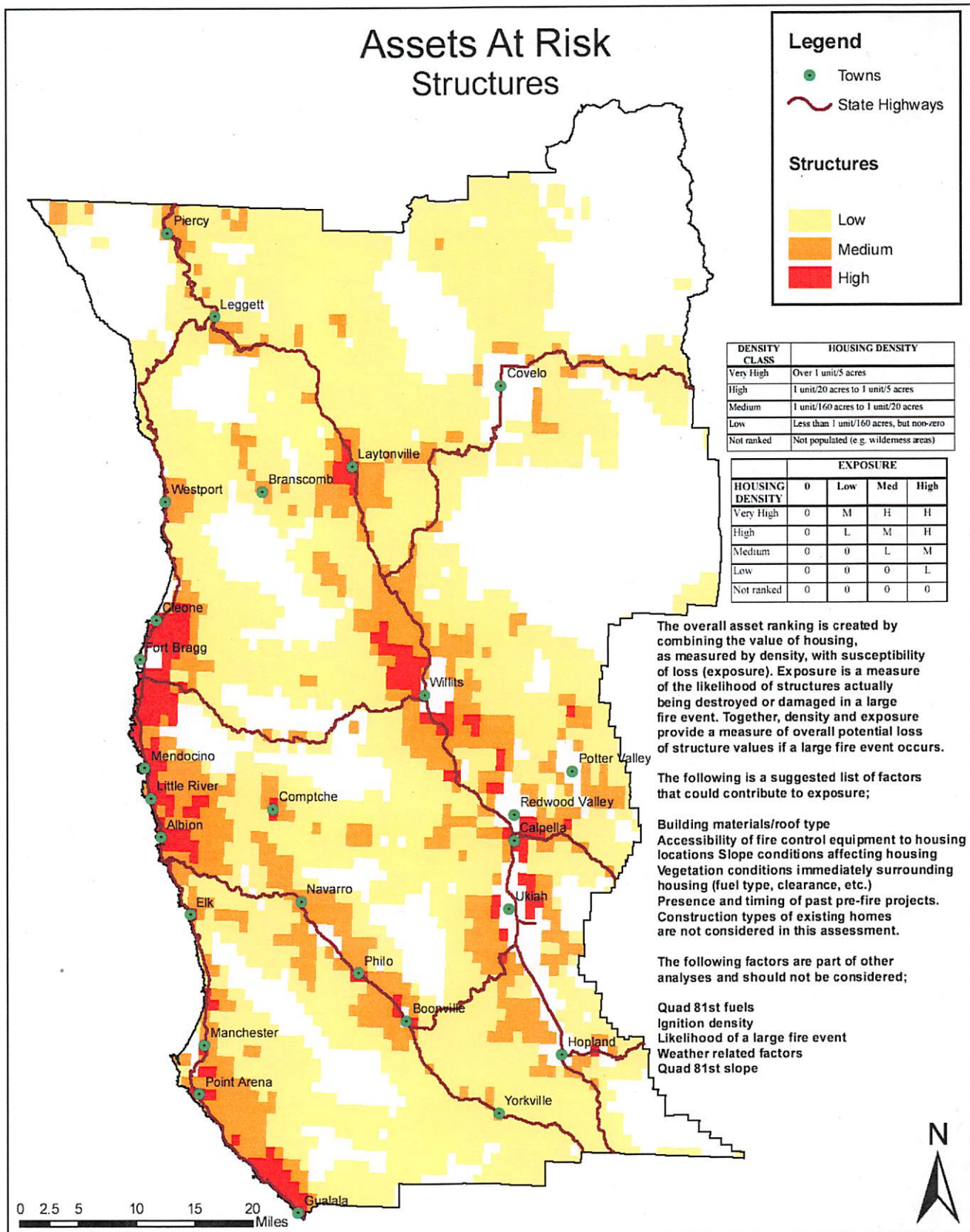




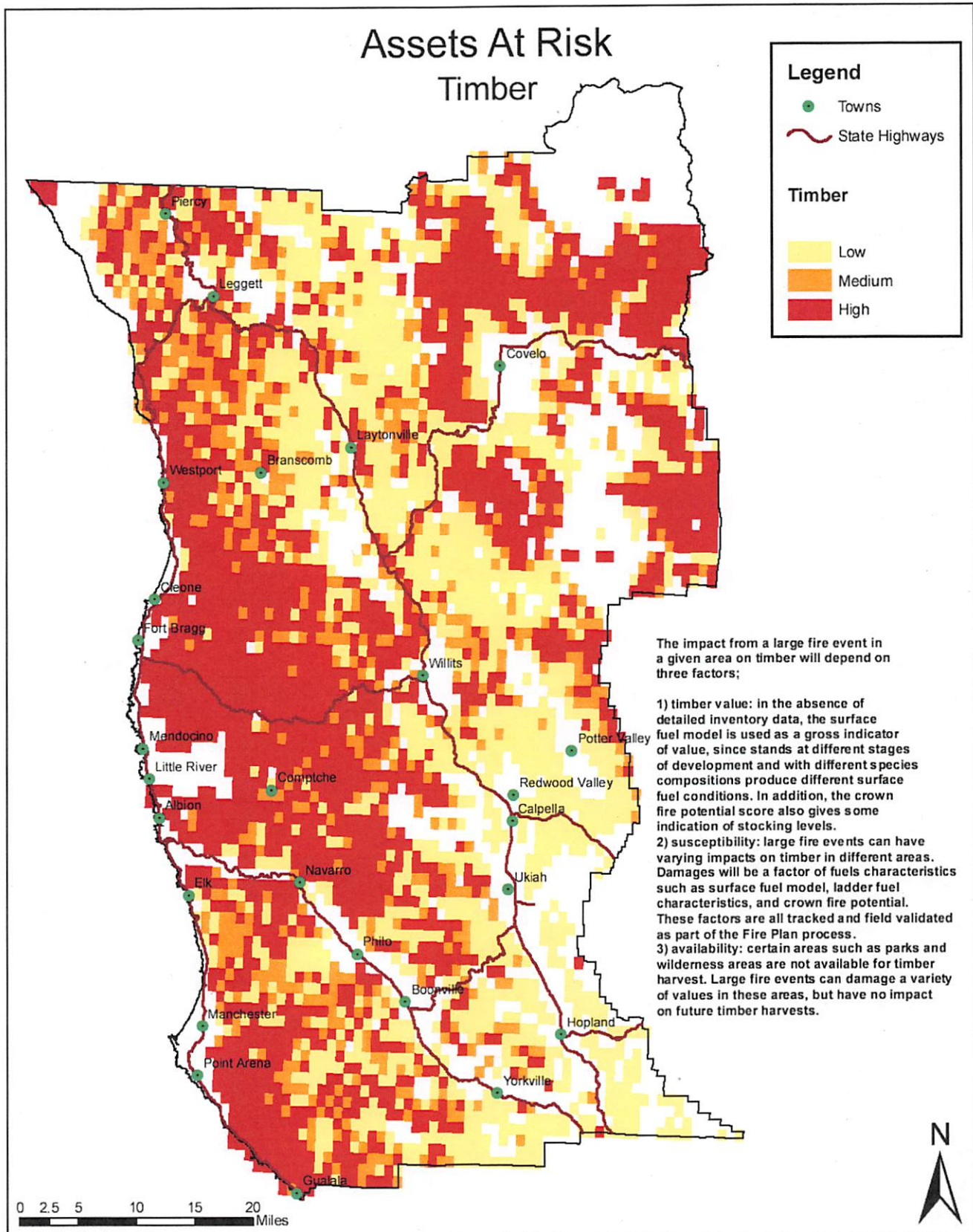




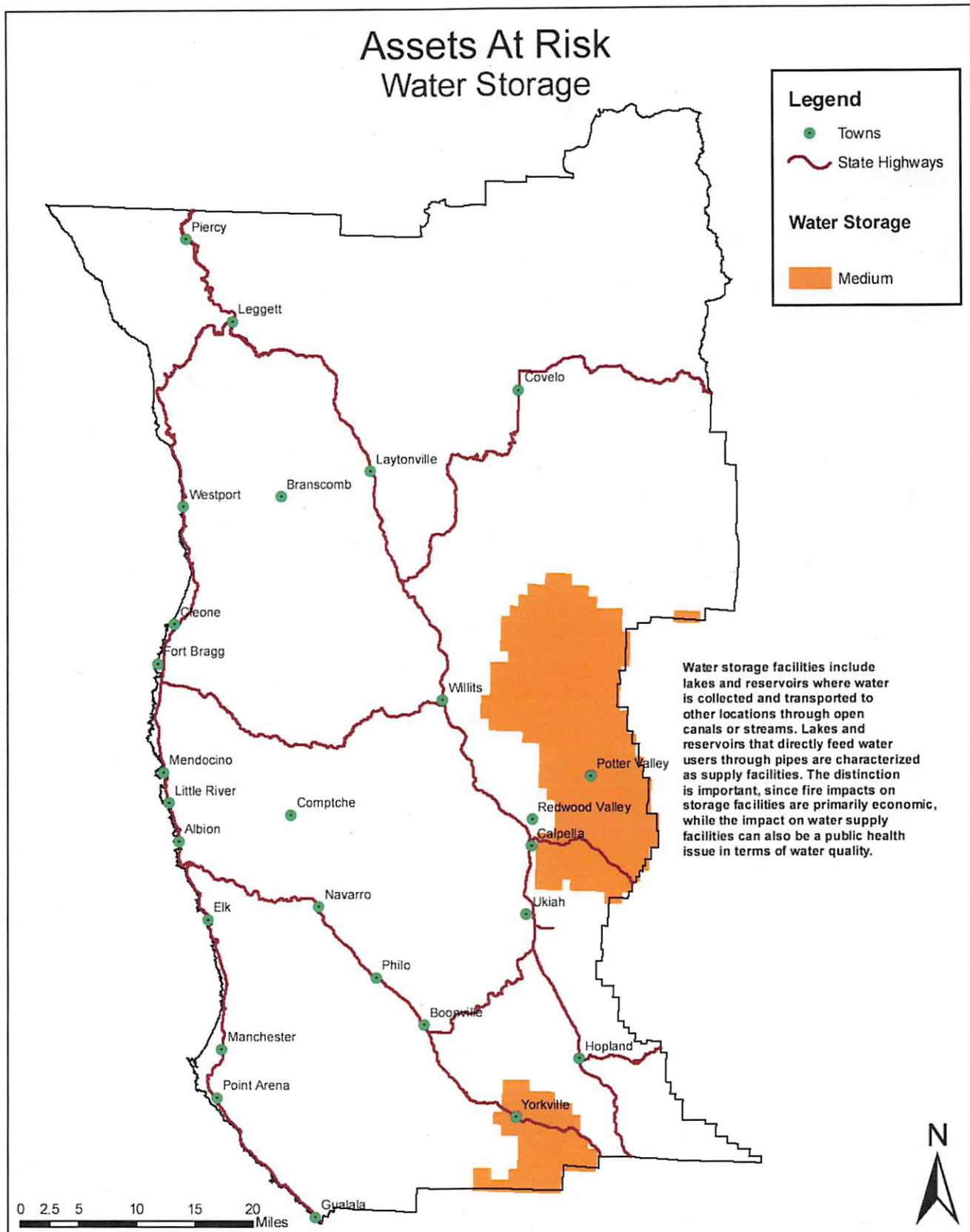


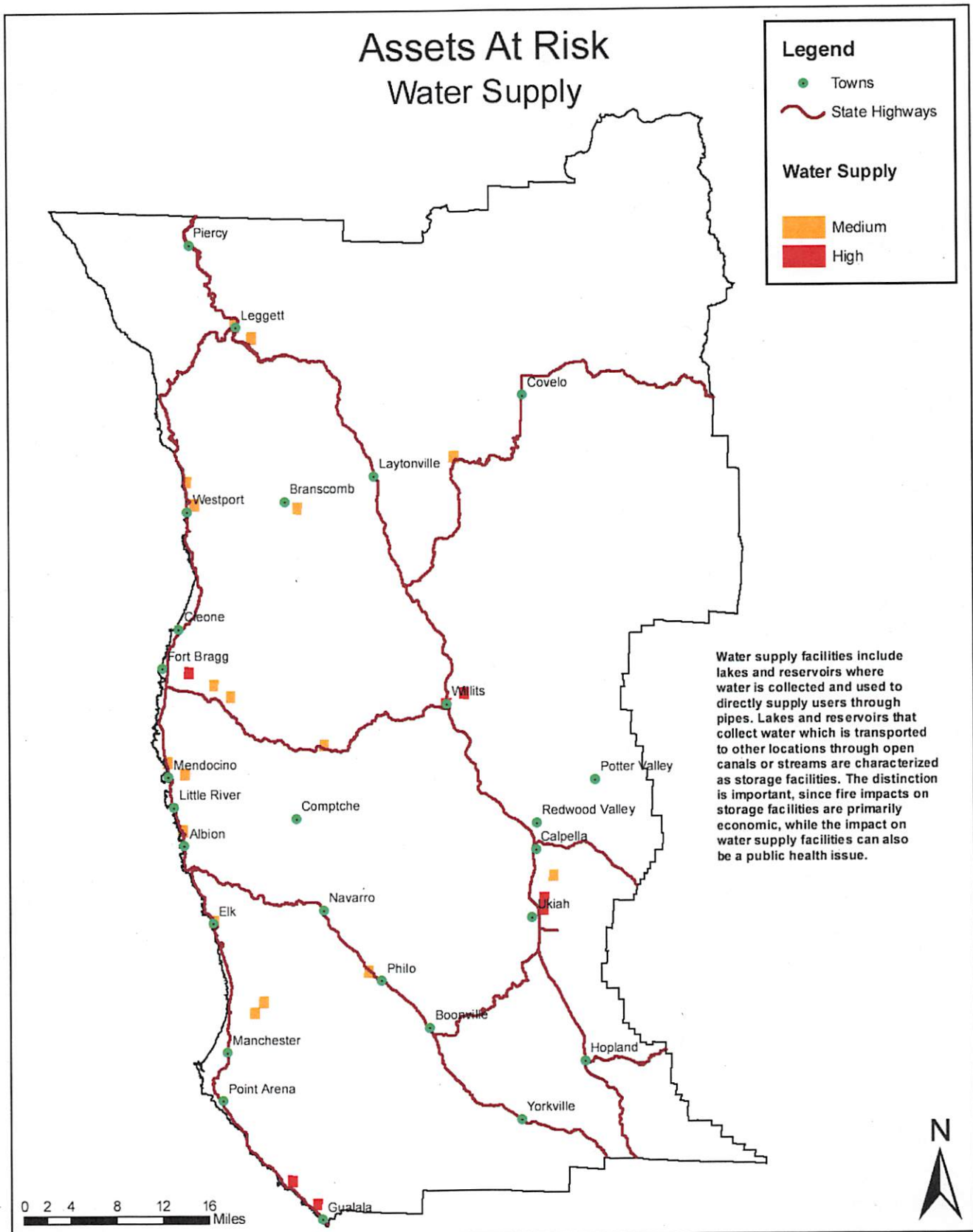












## **MENDOCINO UNIT STAKEHOLDERS**

The California Fire Plan defines a Stakeholder as “any person, agency, or organization with a particular interest – a stake – in fire safety and protection of assets from wildland fires.” Current Mendocino County stakeholders include all county residents, landowners, businesses, and governmental agencies, particularly these, most of whom have in some way been involved with creation of this CWPP:

- City of Fort Bragg
- City of Point Arena
- City of Ukiah
- City of Willits
- Anderson Valley Community Services District
- Brooktrails Township Community Services District
  
- Mendocino County Fire Safe Council
- Brooktrails, Sylvandale & Spring Creek Fire Safe Council
- Pine Mountain Fire Safe Council
- Rancho Navarro Safety Committee
- McNab Ranch Road Association
- Robinson Creek Road Association
- Williams Ranch Road Association
- Numerous local groups in Anderson Valley
- Other Fire Safe Councils currently in formation
  
- Mendocino Emergency Services Authority (County OES)
- Mendocino County Air Quality Management District
- Mendocino County Sheriff’s Office
- Mendocino County Planning Department
- Mendocino County Resource Conservation District
- North Coast Resource Conservation & Development Council
- Mendocino Coast Weed Management Area
- Round Valley Indian Tribes
- Hopland Band of Pomo Indians
- Sherwood Valley Rancheria
- Numerous other Indian Tribes
  
- Mendocino County Fire Chiefs Association
- Mendocino County Fire Prevention Officers’ Association
- Mendocino County Coop Aerial Fire Patrol



- Albion/Little River Volunteer Fire Department
  - Anderson Valley Fire Department
  - Brooktrails Township Fire Department
  - Comptche Volunteer Fire Department
  - Covelo Volunteer Fire Department
  - Elk Volunteer Fire Department
  - Fort Bragg Fire Department
  - Greenwood Ridge Fire Department
  - Hopland Volunteer Fire Department
  - Leggett Valley Fire Protection District
  - Little Lake Fire Protection District
  - Long Valley Fire Protection District
  - Mendocino Volunteer Fire Department
  - Piercy Fire Protection District
  - Potter Valley Fire Department
  - Redwood Coast Fire Department
  - Redwood Valley/Calpella Fire District
  - South Coast Fire Protection District
  - Ukiah Valley Fire District
  - Ukiah City Fire Department
  - Westport Volunteer Fire Department
- 
- California Department of Transportation (CalTrans)
  - California Department of Fish and Game
  - California State Parks and Beaches
  - California Conservation Corps
  - California Department of Corrections
  - California Highway Patrol
  - University of California Hopland Field Station
- 
- Bureau of Land Management (U.S. Department of the Interior)
  - U.S. Forest Service (U.S. Department of Agriculture)
  - Natural Resources Conservation Service (USDA)
  - U.S. Fish and Wildlife Service
  - U.S. Army Corps of Engineers at Lake Mendocino
- 
- Pacific Gas and Electric Company
  - California Western Railroad (Skunk Train)
  - Numerous large landowners

## **PART TWO: UNIT FIRE MANAGEMENT ACTION PLAN**

### **CDF BATTALION REPORTS**

As was noted earlier, the Planning Collaborative determined in January 2005 to utilize Planning Zones equivalent to the Mutual Aid Zones used by local emergency response agencies. Those zones correlate to CDF Battalions and Planning Meeting locations as follows:

Planning Zone 1: CDF Battalions 1, 2, and 4 (north and northeast)  
Covelo, Willits/ Brooktrails/ Pine Mountain, Laytonville, and Leggett/ Piercy

Planning Zone 2: CDF Battalion 3 (southeast and central)  
Hopland, Ukiah, and Redwood Valley

Planning Zone 3: CDF Battalion 5 (southwest)  
Anderson Valley and Point Arena/ Gualala

Planning Zone 4: CDF Battalion 6 (west central and coastal)  
Mendocino/ Fort Bragg and Westport

In this section, each CDF Battalion will be described in two parts:

- 1) A report prepared by the CDF Battalion Chief or Captain
- 2) Additional information from the Fire Safe Council about the grassroots “flavor” of the community meetings, plus ideas, concerns, and assets at risk identified by attendees

## **CDF BATTALION 1 / PLANNING ZONE 1: COVELO**

Battalion 1 of CDF's Mendocino Unit consists of 272,729 acres of State Responsibility Area (SRA) located in the northeast corner of Mendocino County. Within the Battalion is the town of Covelo, centered in Round Valley, with a population of approximately 2,200 people. A large percentage of the population -- approximately 1,300 -- are Native Americans who live on Round Valley Indian Tribe (RVIT) controlled lands established in 1856. The Round Valley floor is predominately Local Responsibility Area (LRA) and fire protection is the responsibility of the Covelo Fire Protection District (CFPD), although CDF responds to all calls in the District through an automatic mutual aid agreement.

The real estate market boom has reached the Round Valley, causing land and home prices to double over the last year. The economy is mainly supported by cattle ranchers, small timber harvest projects, and a great deal of "medical" marijuana. The climate is Mediterranean in type, and vegetation is oak woodlands changing to conifer timberlands in the higher elevations.

### **COLLABORATION**

CDF's Covelo station, the Covelo Fire Protection District, and the U.S. Forest Service have joined forces for several public education activities at local schools and community events. CDF also works with the Round Valley Indian Tribes' Department of Natural Resources on vegetative fuel reduction in the SRA. CDF engine and dozer crews from Covelo have constructed a fuel break on the western ridge above the Round Valley Indian Housing tract, and CDF crews will continue to maintain it. CDF has also taught several Incident Command Classes to the Round Valley Indian Tribe crews to assist them to qualify for fire line duty.

The USFS, CDF, CFPD, and the Fire Safe Council have determined that the entire Covelo battalion is an at-risk WUI area, with several specific areas having greater hazards.

### **LOCAL FIRE PROBLEM**

To address the fire problem in the Covelo Battalion without looking at the Local Responsibility Area fire causes would not produce a true evaluation. More than 70 percent of the fires in the Battalion occur within one square mile on the Round Valley Indian Housing tract within the LRA. Arson is the leading cause of fire in the Battalion and has been for several years. The County Sheriff's Office and CDF work cooperatively to investigate and incarcerate arsonists. Thus far in 2005, two local arsonists have been arrested, in addition to one in 2004. Local, state, and federal fire cooperators as well as the Sheriff's Office continue to educate in the schools and community in hopes of reducing arson and accidentally caused fires.



## **PAST PROJECTS**

The “Fire Defense Plan” prepared for the RVIT by CDF in May 1992 is intended to be an integral part of land management planning on the Indian Tribe lands. It identifies several fuel breaks and Vegetation Management Program projects that can mitigate hazards and risks impacting the Battalion and the Covelo community. With the increasing likelihood of wildfires on the west side of the valley, it is imperative that a maintained fuel break exist on the ridge west of the Round Valley Indian Housing Tract. As was noted above, CDF constructed and continues to maintain a fuel break there, known as the Little Valley fuel break. This break is an extension of one completed by the RVIT crews and provides direct protection to the 100 homes below it.

Continuing northwest from Little Valley, another fuel break, known by the name “Pink,” was developed in the plan. This break will minimize the risk of uncontrolled fires becoming large and damaging on both the west side of Round Valley and the east side of Poonkinney Ridge.

Bulldozers and 15-person hand crews are working year round on fuel breaks and hazard reduction, thanks to the RVIT Resource Management section. Since 2000, the RVIT has established nine new fuel breaks. All of these are grant funded, mechanically installed by a crew of 15, and designed to protect natural resources such as timber, in addition to homes. The fuel breaks and dates of creation are: Big Bend (2002), Updegraff (2001), Brushy (2003), Ten Bear (2003-2004), Perry (2001), Little Valley (2001-2002), Short Creek (2003/2004), Murphy (2001), and Nomalaki (2000).

## **FUTURE PROJECTS**

The southeast corner of Round Valley is called Chicken Ridge and Pigeon Ridge, where approximately 75 to 100 homes and other structures are located on a northwesterly slope with a large vegetative fuel load mixed among the structures. This area has had little fire activity in the past several years, but has the potential to suffer from a large and damaging fire.

CDF Covelo would like to begin more public education so homeowners can prepare themselves for a Wildland-Uban Interface fire. We plan to begin with public meetings and road association meetings to show a cooperative effort and educate community residents.

## **FIRE SAFE COUNCIL COMMUNITY MEETING IN BATTALION 1**

The U.S. Forest Service hosted a community outreach meeting for Covelo and the surrounding Round Valley on May 9, 2005. Several USFS personnel participated, including Blaine Baker, District Ranger for the Covelo and Upper Lake Districts of the Mendocino National Forest. The presence of local Fire Chief Bill Baker, (former) CDF Battalion 1 Chief

Bob Rodello, Evan Wilson of the Round Valley Indian Tribes Natural Resources Department, and a resident of private property within the National Forest boundaries provided a good variety of perspectives.

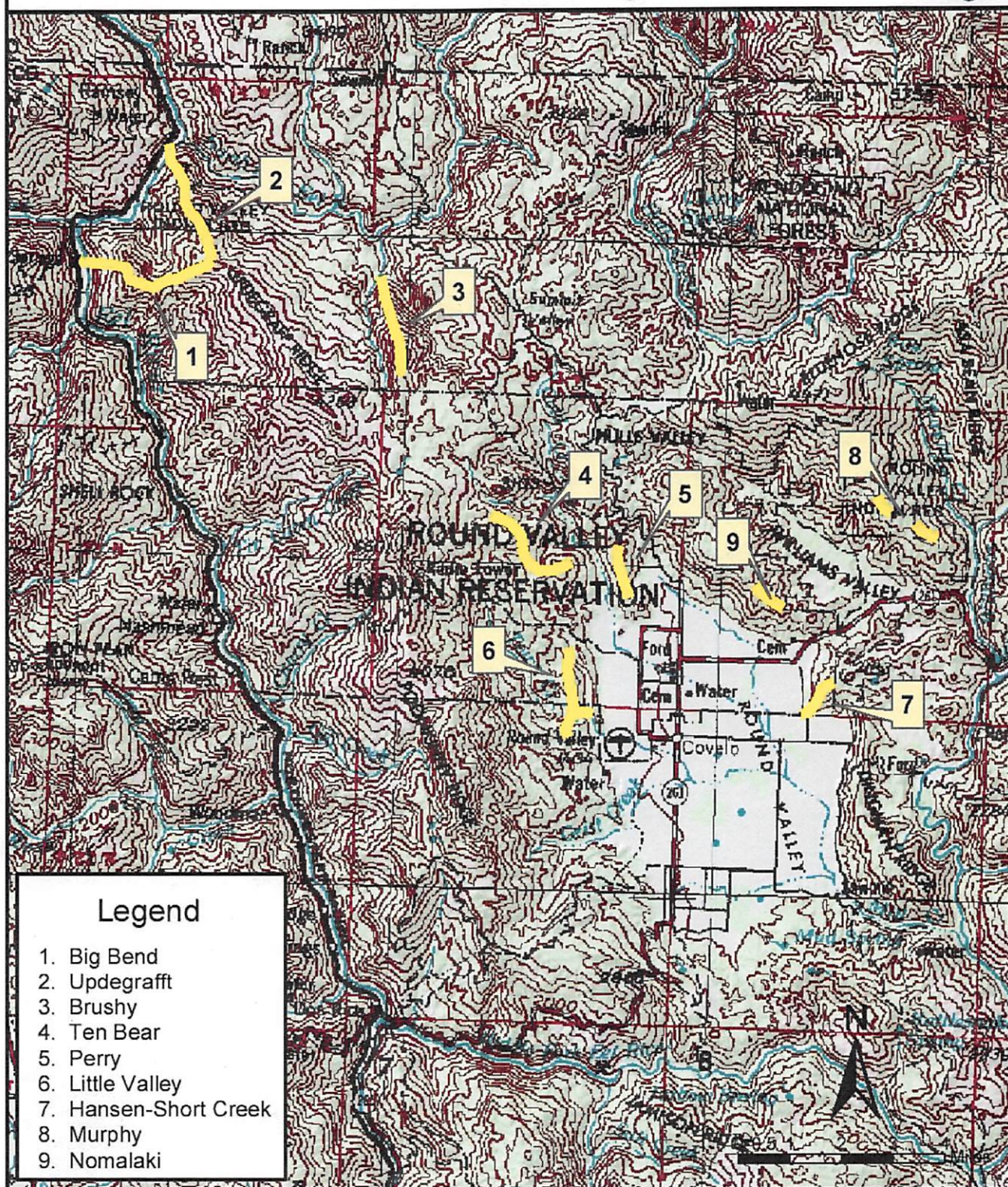
Residents noted that Round Valley, a basin surrounded by mountains, historically traps smoke from wildfires even dozens of miles away. The potential for soil erosion after a fire, loss of power due to only one electric transmission line, and difficulty in evacuation were concerns expressed by several persons. The Eel River Forest Service Station was named as an historic building to be protected. Further ideas and needs expressed by attendees are as follows:

- **Public Education about defending homes:** need community involvement, fire prevention inspections, and expansion of the existing Round Valley Disaster Action Team program, Red Cross, Office of Emergency Services, and Community Emergency Response Team (CERT)
- **Fuel Reduction:** need control burns, fuel breaks, and thinning of trees
- **Water:** need more storage, installation of hydrants with generator backups on pumps, and distribution of fire hoses to each ranch or resident with fire department accessible water supply
- **Evacuation:** need evacuation plan, improved escape routes, and address posting



# Covelo Battalion

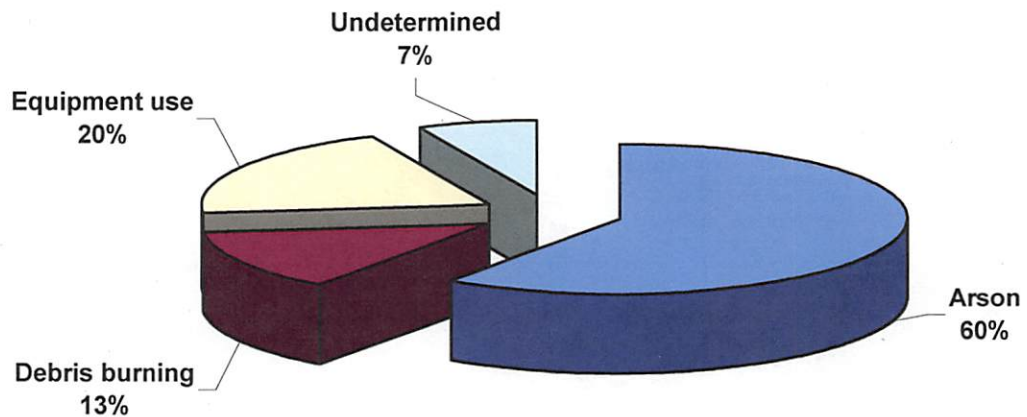
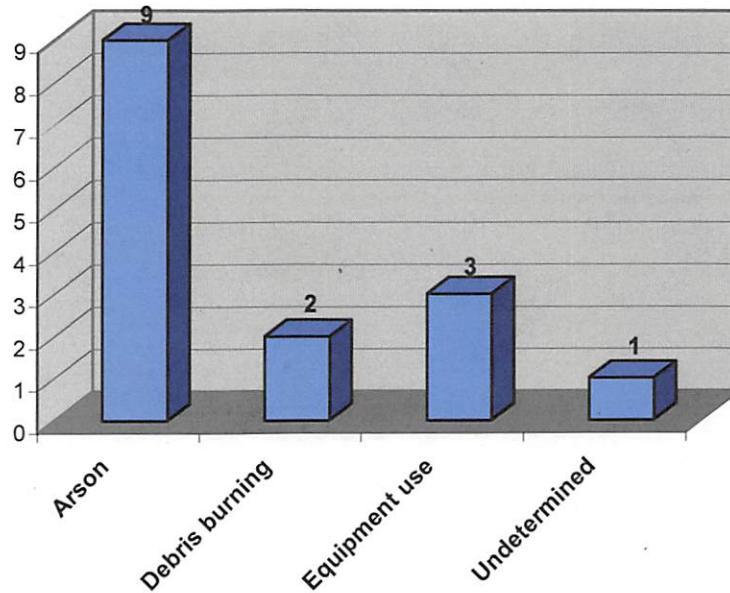
## Fuel Reduction Projects





## Battalion 1 Fire Cause 2004

Total Fires: 15



## **CDF BATTALION 2 / PLANNING ZONE 1: WILLITS**

CDF's Willits Battalion encompasses 384 square miles and 245,636 acres of State Responsibility Area. State Highway 101 bisects the Battalion, with predominately redwood and Douglas-fir forest to the west and mixed pine forest, brush, and grassland to the east. Highway 20 goes west from Willits to Fort Bragg, leaving the Willits Battalion 13 miles west of Willits. Highway 20 co-joins Highway 101 in Willits and goes south, leaving the Battalion in Redwood Valley. The eastern border of the Battalion is the Mendocino National Forest's Covelo and Upper Lake Districts.

One CDF Fire station, Howard Forest, co-located with Unit Headquarters, provides the initial ground attack fire protection for Battalion 2. The fire complement of the station consists of two Incident Command System (ICS) Type 3 fire engines plus one reserve Type 3 engine, a Type 2 bulldozer unit, and a Mendocino County Hazardous Materials Response vehicle. One fire lookout facility, Two Rock, closed in 1994, is no longer funded for staff or maintenance, and is suffering the effects of weather and vandalism.

In addition to their fire protection work, Battalion 2 personnel assist with various functions relative to the operation of Unit Headquarters facilities. These facilities include the Unit's Administrative Headquarters, Helitack Base, Training Center, Resource Protection and Prevention Bureau offices, Logistics Service Center, Automotive Fleet Maintenance shops, state-of-the-art breathing apparatus maintenance facility, the County's Emergency Command Center, and Howard Park, which is open to the public. Howard Forest fire station personnel often provide fuel, meals, lodging, and other services to the many CDF guests and employees who use these Unit facilities year-round. They also provide rescue and medical aid mutual response in the battalion, including to dozens of traffic accidents on Highway 101 each year.

A combination paid-volunteer fire department, the Little Lake Fire Protection District, provides municipal fire protection coverage to the District boundaries, including the city of Willits. Additionally, one volunteer fire department, Brooktrails Township Fire Department, protects improvements in the Brooktrails Township, Sylvandale, and Spring Creek subdivisions. These two fire departments provide mutual aid initial attack to State Responsibility Area fires in the Willits Battalion. The city of Willits and the surrounding Little Lake Valley are in Local Responsibility Area protection. The community of Brooktrails has 1,488 dwellings in State Responsibility Area wildland and is at major risk of a significant dollar loss vegetation fire. The area of Pine Mountain to the east has 304 homes and is similarly at risk. Both of these areas will be discussed later.

The Battalion overlays Willits, the only incorporated city, several unincorporated communities of various sizes, two high schools, and five grade schools. The future outlook

is for increased tourist traffic and increasing rural housing subdivisions. Golf resort expansion planned for the Fort Bragg area, reasonable local housing prices, and coastal recreation areas accessed via Highway 20 from Highway 101 in Willits keep the area a thriving crossroads and desirable place to reside. As the subdivisions expand, particularly Brooktrails and the unincorporated areas around Willits, an increasing fire problem exists in both the prevention and suppression of fires. As noted in the statistics, the increase in traffic will cause an increase in vehicle fire and medical aid responses and a need to increase public awareness of fire hazards and fire prevention.

Miles of overhead power lines, a continuing source of vegetation fire starts, accompany ongoing building in the wildland. An option to eliminate this persistent threat for vegetation fires would be community planning requiring underground utility service. This would nicely complement Public Resources Code 4290 regulations that are currently being implemented for new rural construction.

Area logging is decreasing due to the economy, environmental concerns and opinion differences. Current harvest plans are mixed between small and large acreage. With fewer logging operations the cumulative fire hazard from logging slash buildup increases only slightly annually in comparison to the buildup created during past boom logging eras. Additionally, the threat of fire starts in the remote backcountry from logging operations is reduced.

## **COLLABORATION**

Partners cooperating in the development of the content of this Battalion 2 Plan include the U.S. Forest Service, Bureau of Land Management, Bureau of Indian Affairs, Mendocino County Sheriff's Office, Little Lake Fire Protection District, Brooktrails Township Fire Department, Mendocino County Fire Safe Council, Mendocino County Air Quality Management District, Brooktrails, Sylvandale & Spring Creek Fire Safe Council, Pine Mountain Fire Safe Council, Williams Ranch Road Association, and the Sherwood Valley Rancheria.

Events such as the Brooktrails Fire Department annual tabletop exercise; Hearst community meetings; Mendocino County Fire Safe Council meetings and community outreach events; Brooktrails, Spring Creek & Sylvandale Fire Safe Council meetings; Pine Mountain Fire Safe Council meetings; Williams Ranch Road Association meetings; Spring Creek Road Association efforts; CDF-Fire Battalion Two Fire Safe Council Forum meetings; and Sherwood Valley Rancheria Fire Crew formation and work project proposal assembly have all played a part in defining this plan. Additionally contributions from individual community members, business owners, and involved citizens cannot be overlooked, for their efforts are in integral part of the direction for the plan.



All potential natural hazards that may impact the community infrastructure are of concern to the participants, such as vegetation fires, storms, flooding, and earthquakes. ***Area residents have consistently voiced the greatest concern about the threat to life and property from wildland vegetation fires. The threat is an annually recurring, consistent theme that stakeholders recognize must be addressed because we choose to live and work in this fire prone environment.*** Broadly, all issues related to fire are of concern, such as fire planning (including mapping, signage, staging areas, and safety zones), evacuation, defensible space, water supplies, community education, and communications.

## **ASSETS AT RISK**

Stakeholders at the Battalion 2 community meeting in April 2005 prioritized the actual Wildland-Urban Interface communities as the greatest assets at risk. These communities include but are not exclusive to:

- Willits
- Brooktrails
- Sherwood Valley (1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> Gates)
- Sylvandale
- Spring Creek
- Pine Mountain
- Hearst
- Ridgewood
- Subdivisions in the areas of the Williams Ranch, Sherwood Rancheria, Shaffer Ranch, Muir Mill Road, Irmulco, String Creek, Hilltop Road, Foster Mountain, Canyon Road, and Tomki Road

Ranking priorities for mitigation involves population density in the actual Intermix zone of wildland and dwellings.

## **THE FIRE SITUATION**

### **General Description of the Present**

A Vegetation Management Program (VMP), as we have historically experienced it, with CDF-Fire leading the charge in coordinating contractual efforts, providing staff funding, establishing control lines, providing the firing equipment, and actually doing the burning, is no longer being done. Historically, Battalion Fire Prevention Plans included VMP activity in the Brooktrails Community Services District, and several thousand acres of vegetation management burns in Eden Valley and surrounding the Little Lake area. Within the last four years none of those plans has come to fruition. The identified areas are still primary targets, but the program of the past is not currently adequately funded to permit VMP burning. Limited public tolerance for residual smoke laden air, plus conflicting environmental

concerns for air quality, wildlife, and fish, have significantly closed the window of opportunity for VMP burning.

### **The Desired Future Condition**

Fire is widely recognized as a natural part of the California environment. Ecologically, studies have demonstrated wildlife's dependence on, and rapid recovery from, vegetation fires without funds being expended for regeneration. Much of the Willits Battalion would benefit from prescribed burning. Prescribed fires are far less costly than an uncontrolled fire burning through a developed community that will be costly to rebuild. The efficient burning of wildland tracts would provide an effective reduction of fuel loading in high, very high, and extreme fire hazard severity zones. However, this will not happen until vegetation management burning once again becomes a public priority and policy that supersedes the current and effective limiting concerns.

### **Ignition Workload Assessment: Brooktrails Fuels Management**

The Brooktrails Township is an unincorporated community located immediately northwest of the City of Willits. This steep and wooded area was noted as being the first community in the United States to blend a four square mile redwood and mixed growth forest conservation park with a fully improved residential subdivision. The conservation park is now called the Brooktrails Redwood Park and is locally referred to as the "Greenbelt." The park covers 2,300 acres that border a large portion of the lots in the subdivision. The Brooktrails Township is comprised of multiple subdivisions. Three main areas, Brooktrails, Sylvandale, and Spring Creek, are the most heavily populated. The entire 7,773 acre forested development contains 6,710 parcels and 1,488 dwellings.

In the event of a large fire in or threatening the Brooktrails subdivisions, the 4,194 residents and responding agencies could face many problems. Many homes are surrounded by overgrown, undeveloped lots and border the unimproved areas of the Redwood Park or "Greenbelt." Fires could easily carry from the grassy openings and chaparral brush fields to the mixed canopy forests. Heavy accumulation of dead and down logging slash caused by years of timber harvesting would further hinder firefighting efforts and enhance fire spotting potential.

Residents fleeing down steep and narrow roads could impede responding fire apparatus, causing road blockage and long response times for fire personnel. Evacuation concerns are compounded by the fact that the narrow, winding Sherwood Road is the only paved major access road and escape route from Brooktrails, Sylvandale, and Spring Creek.

## **Vegetative Wildland Fuels and Structure Fuels**

The Brooktrails Township Community Services District, which owns the forested Greenbelt around the community, as well as the members of the Brooktrails, Sylvandale, & Spring Creek Fire Safe Council and the Pine Mountain Fire Safe Council, have long recognized that they live in an area classified by CDF as a “Very High” fire severity zone. Many other Intermix areas of the Battalion are also classified as “Very High.”

The Brooktrails Township subdivisions are some of the densest wildland intermix developments in Mendocino County. The limited access, steep slopes, and roads and dwellings interspersed with undeveloped, overgrown parcels surrounded by a natural Greenbelt environment, offer the potential for expensive and large losses to wildland fire. The unincorporated community is subject to Public Resources Code 4290 requirements for new development.

## **Frequency of Severe Fire Weather**

The saving grace for the area inland of the California north coastal strip is the seasonal onshore marine push which usually keeps overnight relative humidity high during normal patterns. The occasional interior high pressure systems that established conditions for the 1991 Oakland Hills Fire and the 1997 Marin County Vision Fire create the same pattern in Mendocino County over the Willits area. Unlike the localities for the two fires mentioned above, the Willits area is 30 miles inland and does not enjoy the ample moisture recovery of Oakland and Inverness. When interior high pressure conditions develop, producing hot, dry north/northeast offshore winds, there is abundant potential for severe fires in the Willits area. These critical weather patterns typically develop four to five each fire season. Each spell usually builds and dissipates within five days.

## **PROJECTS**

Between 2001 and 2004 a federally funded State Fire Assistance (SFA) Wildland Urban Interface grant supported 141 acres of fuel modification on Brooktrails Community Service District Greenbelt properties, plus public education. Although land clearing work was completed in December 2003, our public education component (community fire prevention/fire safe council meetings, media releases, and public contacts) continues to pay dividends by increasing the public's awareness of their obligation to take action to protect their own communities.

## **Ongoing Prevention Activities**

- Cooperation with the Mendocino County Fire Safe Council in holding community outreach events to gather stakeholder input on “assets at risk”



- Participation in school programs emphasizing home and fire safety
- Participation in the annual Brooktrails Fire Department tabletop disaster drill and Willits July 4<sup>th</sup> parade
- Distribution of 8,300 LE-38 style wildfire prevention flyers to residents in the greater Willits and Laytonville areas in cooperation with Coast To Coast Hardware in Willits, the County Fire Safe Council, and the Little Lake and Brooktrails fire departments
- Maintaining and improving working relationships with local government fire protection agencies and the Brooktrails, Sylvandale, and Spring Creek and Pine Mountain Fire Safe Councils; ongoing fire prevention efforts and Fire Safe Council forums in cooperation with Williams Ranch Road Association and the Hearst and Irmulco communities
- Installation of roadside Fire Prevention signs
- LE-38 home and mill site inspections
- Establishing a pool of CDF Volunteers in Prevention

### **Future Projects**

The Bureau of Land Management has recently approved funding requested by the Mendocino County Fire Safe Council, for development in 2006 of a Fire Plan for the Brooktrails, Sylvandale, and Spring Creek areas. The emerging plan will promote community awareness, education and *implementation* of various methods of fuel reduction, including education about prescribed burning for fuel hazard reduction, which could be utilized on public and private lands. The plan will address protection of community-identified assets at risk, identification and accurate mapping of access roads and evacuation routes, and the clearance and maintenance of these corridors.

- Pine Mountain Fire Safe Council: Addressing, signage, road clearing, and defensible space
- Irmulco and Williams Ranch Subdivisions: Establishment of Fire Safe Councils
- Brooktrails Township: Continued development of a “Greenbelt Management Plan”

### **INSTITUTIONAL ISSUES**

Almost all the work that has produced action to date is due to grassroots efforts of community and business members who recognize the threat of wildland fire and its associated needs for planning, mapping, defensible space, public awareness and education, and the proactive effort needed for pre-fire activities. These community members have volunteered their time and limited resources to coordinate community meetings, develop Fire Safe Councils, and consider ways to protect water resources, improve communications during a crisis, produce detailed community maps, and generally provide the catalyst for further society involvement. They have proven willing to work with the fire agencies to develop meaningful and active action plans to advance community safety beyond the levels which agency staffing and funding levels allow.

Funding sources that assist the community to see a return on their personal investment by being able to defend their lives and property from a firestorm or other natural disaster, to establish defensible space to permit safely sheltering-in-place or to have adequate communications and escape routes to evacuate to identified safe areas, and to save community water supply infrastructure assets – all these will be pennies on the dollar due to damage from fire losses.

## **FIRE SAFE COUNCIL COMMUNITY MEETING IN BATTALION 2**

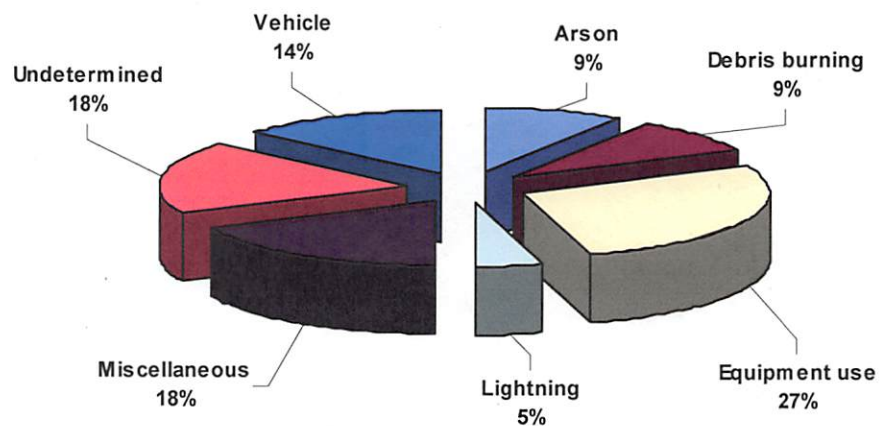
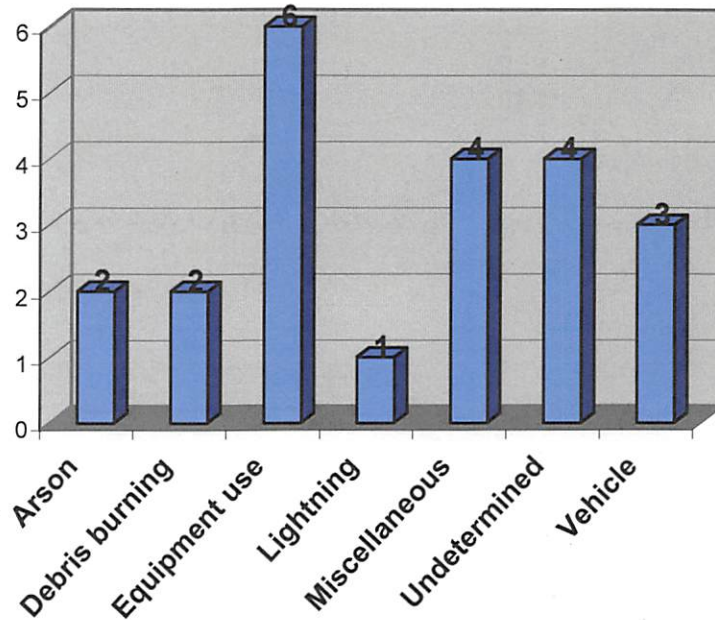
Thirty-three persons filled the Brooktrails Fire Department training room for the April 20<sup>th</sup> community Fire Plan meeting, hosted by Chief Daryl Schoeppner and Captain Jon Noyer and facilitated by CDF Battalion Chief Mark Tolbert and MCFSC President George Britton. The communities represented were primarily Brooktrails, Sylvandale, Spring Creek, and Pine Mountain. Participants included Chief Jeff Smith of the Little Lake Fire District, numerous personnel from CDF and the Brooktrails Fire Department, Tony Orth (President) and Mary Ziady of the Brooktrails Township Community Services District Board of Directors, and Mike Chapman, BTCSD General Manager.

The above Battalion report ably describes the overall Battalion 2 situation. Here is a recap of the concerns and ideas raised during the meeting, in attendees' own words:

- Prepare for communication and alerts during a wildfire
- Create easy-to-use evacuation checklist: What to do and where to go?
- Educate for emergency preparedness: Shelter in place or evacuate?
- Pre-identify and mark escape routes and evacuation collection areas
- Create safety zones, including at Ells Field Airport (located in Brooktrails)
- Improve street and address signs, and create better maps
- Plan to assist disabled persons
- Plan for animal evacuation: horses, pets, other animals
- Clear underbrush and grass around homes, along escape routes, and in Greenbelt
- Create fuel breaks
- Protect water supply, water tanks and lakes, and water plant
- Remove trees near ponds so helicopters can dip from them

## Battalion 2 Fire Cause 2004

Total Fires: 22





## CDF BATTALION 3 / PLANNING ZONE 2: UKIAH

Battalion 3 encompasses a wide variety of vegetative fuel types and a vast array of populations. Its boundaries reach south to the Sonoma County line, north to the Mendocino National Forest, west to the redwoods of Montgomery Woods State Park, and east to the Lake County line. The Battalion includes two main state highways: Highway 101 traveling north and south and Highway 20 east and west. Both of these see heavy traffic, especially during the summer tourist season. An increase in county population means the traffic continues to increase as well.



CDF-Fire protection for the Ukiah Battalion is provided by two Schedule B (Amador) fire stations. The Hopland station, located on Highway 101 two miles north of Hopland, is a single engine station covering the southern half of the battalion. The Ukiah station, located at the intersection of North State Street and Hensley Creek Road, has two engines and one medium dozer and covers the northern half. During

2005 and 2006 the old Ukiah facility is being replaced with a new one at the same location, and CDF personnel are temporarily responding from a former fire station at North State Street and Highway 101, in conjunction with the Ukiah Valley Fire District, which is renting the facility.

Battalion 3 provides emergency services in the City of Ukiah and the entire Ukiah Valley area, and the communities of Hopland, Redwood Valley, and Potter Valley. Local and federal governments also provide fire and medical services within Battalion 3: Ukiah City Fire Department, Ukiah Valley Fire District, Hopland Volunteer Fire Department, Potter Valley Volunteer Fire Department, Redwood Valley/Calpella Fire District, and the U.S. Forest Service. CDF continues to have a fantastic working relationship with all of these fire agencies, including formal training and other assistance.

The Battalion's working relationship with other public service agencies -- such as the California Highway Patrol, Mendocino County Sheriff's Office, Ukiah Police Department, Ukiah Ambulance Service, Redwood Empire Hazardous Incident Team (REHIT), Tribal



police agencies, CalTrans, Bureau of Land Management, and U.S. Army Corps of Engineers -- is also exemplary, due to the strong commitment and dedication of Battalion 3's personnel.

During fire season, the Ukiah station has automatic aid agreements with the Ukiah Valley Fire District, Ukiah City Fire, and Redwood Valley/Calpella Fire. Battalion personnel work especially closely with the Ukiah Valley District, sharing a fire station and providing fire, rescue, and emergency medical services to the District's northern half. CDF also provides direct protection to the U.S. Army Corps of Engineers' Lake Mendocino Recreation Area and BLM's Cow Mountain and Red Mountain Recreation Areas. The Hopland station has an automatic aid agreement with the Hopland Fire Department and responds to all calls within their protection area.

Several popular recreation and tourist locations within Battalion 3 attract visitors from near and far and cause a large influx of people, especially during fire season. These include the above-mentioned Lake Mendocino, Cow Mountain, and Red Mountain Recreation Areas, plus Montgomery Woods State Park, the Russian River, Eel River, numerous wineries, and the adjacent Mendocino National Forest, all of which bring the public into direct contact with wildland interface areas. In addition, growth of subdivisions and businesses within the Ukiah Valley and Hopland areas is greatly increasing the probability of wildland-interface fires.

### **BATTALION 3 ACREAGE**

- State Responsibility Area: 389,591 acres
- Local Responsibility Area: 150,808 acres
- Direct Protection Area (non-SRA): 30,999 acres

### **BATTALION 3 FIRE PREVENTION ACTIVITIES**



foot-tall Pluggie is especially good with small children, as he is "just their size."

Battalion 3 places very strong emphasis on fire prevention education and activities. Smokey Bear has long been a familiar sight in the Battalion, and in 2004 Sparky the Fire Dog and Pluggie the Fire Hydrant were added to the Battalion's Fire Prevention program. Pluggie, operated by a firefighter by remote control, rolls around and talks interactively with children and adults about fire safety, and occasionally squirts water -- much to the delight of the crowds. The 3-



The team of Smokey, Sparky, and Pluggie, led by Captain Brian Kornegay, has made many successful appearances at schools, fairs, conferences, campfire programs, and parades. Captain Kornegay keeps on hand a supply of fire prevention materials such as plastic fire chiefs hats, stickers, and coloring books.

The full scope of prevention activities in Battalion 3 includes these:

- Participation in school programs emphasizing home and fire safety
- Attending community meetings within the Battalion to teach about wildfire safety
- Actively working with the countywide and local Fire Safe Councils
- Participation in multi-agency Fire Prevention Week activities in October
- Organization and participation in parades to promote fire safety
- Staffing of booths at the Redwood Empire Fair and Redwood Region Logging Conference
- Working closely with news media to spread the Fire Prevention and Fire Safe message
- Placing and rebuilding roadside Fire Prevention signs
- Issuing burn permits in person, with strong emphasis on safety and awareness of state and local Fire laws and regulations
- Monitoring CalTrans mowing projects along Highway 101 and Highway 20
- Performing LE-38 inspections on power lines
- Aggressively performing LE-38 inspections on homes, with strong emphasis on areas where high wildfire probability exists, including these:
  - Oak Knoll/Spanish Canyon areas on Ukiah's southwest side
  - Rogina Heights, Deerwood, and El Dorado subdivisions on Ukiah's east side
  - Greenfield Ranch, northwest of Ukiah
  - Black Bart Trail and Cave Creek subdivision in Redwood Valley
  - Mid-Mountain Ranch in Potter Valley
  - McNab Ranch and Russian River Estates in the Hopland area
- Maintaining the Ukiah West Side Shaded Fuel Break. Emphasis will be on cooperating with the landowners and having them assist with maintaining their portions of the break.
- Continuing to be an integral part of all communities within Battalion 3 by attending parades, home shows, health fairs, exhibitions, and other community events.





## VEGETATION MANAGEMENT PROGRAM (VMP) ACTIVITIES

### Ukiah West Side VMP

This three-phase vegetation management project was conducted in the hills on the west side of the Ukiah Valley, funded by the State Fire Assistance Wildland Urban Interface grant program. These hills have experienced large-scale fires since the turn of the century, with major fires occurring in 1950 and 1959. The City of Ukiah's encroachment into these hills since then has created the significant probability of a very destructive wildland interface fire.



The three planned phases were these, to be completed by the end of 2003:



1. Seven miles of shaded fuel breaks to separate the housing encroachment from brush fields, completed in December 2003.

2. Fifteen miles of mechanically constructed fire breaks within the brush fields, to compartmentalize the fields. Only a portion of this phase has been completed to date.

3. Mosaic helitorch burning of 1,500 acres of southern slopes, within the approximate 7,500 acres of brush fields, to reduce fuel loading in the chaparral fields by a targeted 25%. This burning was cancelled, partially due to fears of escaping fires.



Although all phases were not completed, the shaded fuel break has greatly reduced the fuel loading along this interface line, reducing the scope and damage of a possible interface fire spreading from the hills into the west side of Ukiah.

### **Hopland Field Station Studies, with the BLM Red Mountain VMP**

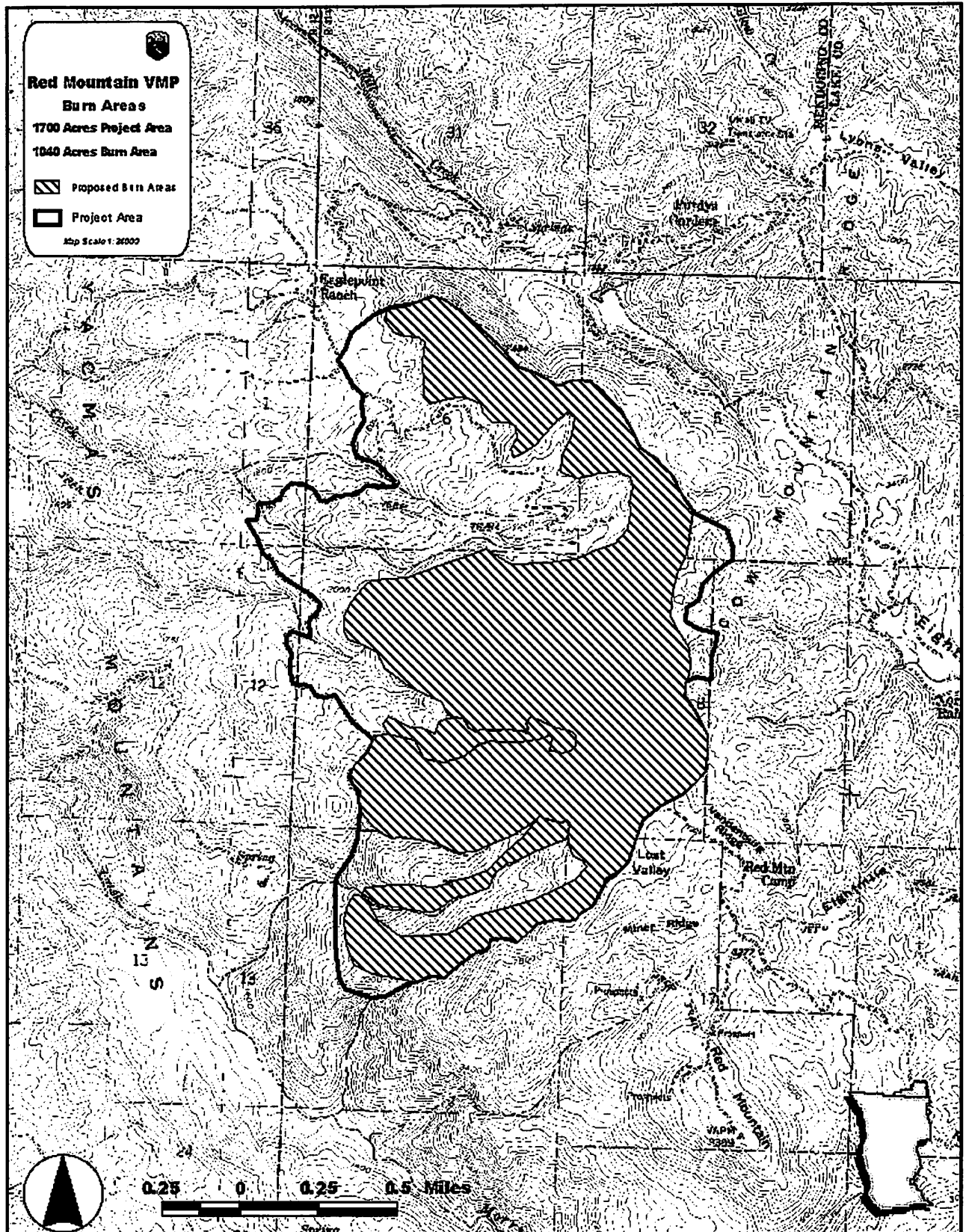
This project was created to assist the Bureau of Land Management and the University of California in conducting prescribed fire treatments for a three-year chaparral research study. In Fiscal Year 2001, the Joint Fire Sciences Program provided \$95,560 to study the efficacy of prescribed burning and mechanical methods in reducing the fire hazard in chaparral. This research project was designed to assess the effects of treatments on (1) fire hazard reduction, (2) recovery of vegetation and ecosystem function, and (3) resurgence of the fuels, and to determine the costs of the different treatments.

The nature of this research project required 30 year or older chaparral. The Red Mountain area was selected based on past fire history, conformance with the management objectives of the Cow Mountain Recreation Area, and the high historical threat of wildfire starting east of Ukiah and running east into Lake County. Prescribed fire treatments were designed to break up fuel continuity to minimize wildfire spread as well as to protect the integrity of research plots from the damaging effects of a wildfire entering the project area. Two private landowners were included in this project in order to strategically break up fuel continuity associated with Mill Creek Road, the main access route to Cow Mountain, which has been the location of many arson fires in the past. The total project area is 1,700 acres, and 700 acres are planned for prescribed fire treatment.

The three phases of the project are these:

- 1) A helitorch, a helicopter-mounted operation to set controlled fires, was used to establish and reinforce perimeter and interior lines in mosaic burns in Spring of 2002.
- 2) Ten research units have been hand-fired (by on-the-ground crews) or mechanically treated since the perimeter lines were established. The plots average 5 to 10 acres in size and are locations of long-term monitoring.
- 3) Helitorch or hand firing operations will be used to clean up any remaining high hazard chaparral areas within the project area through the implementation of mosaic burns.







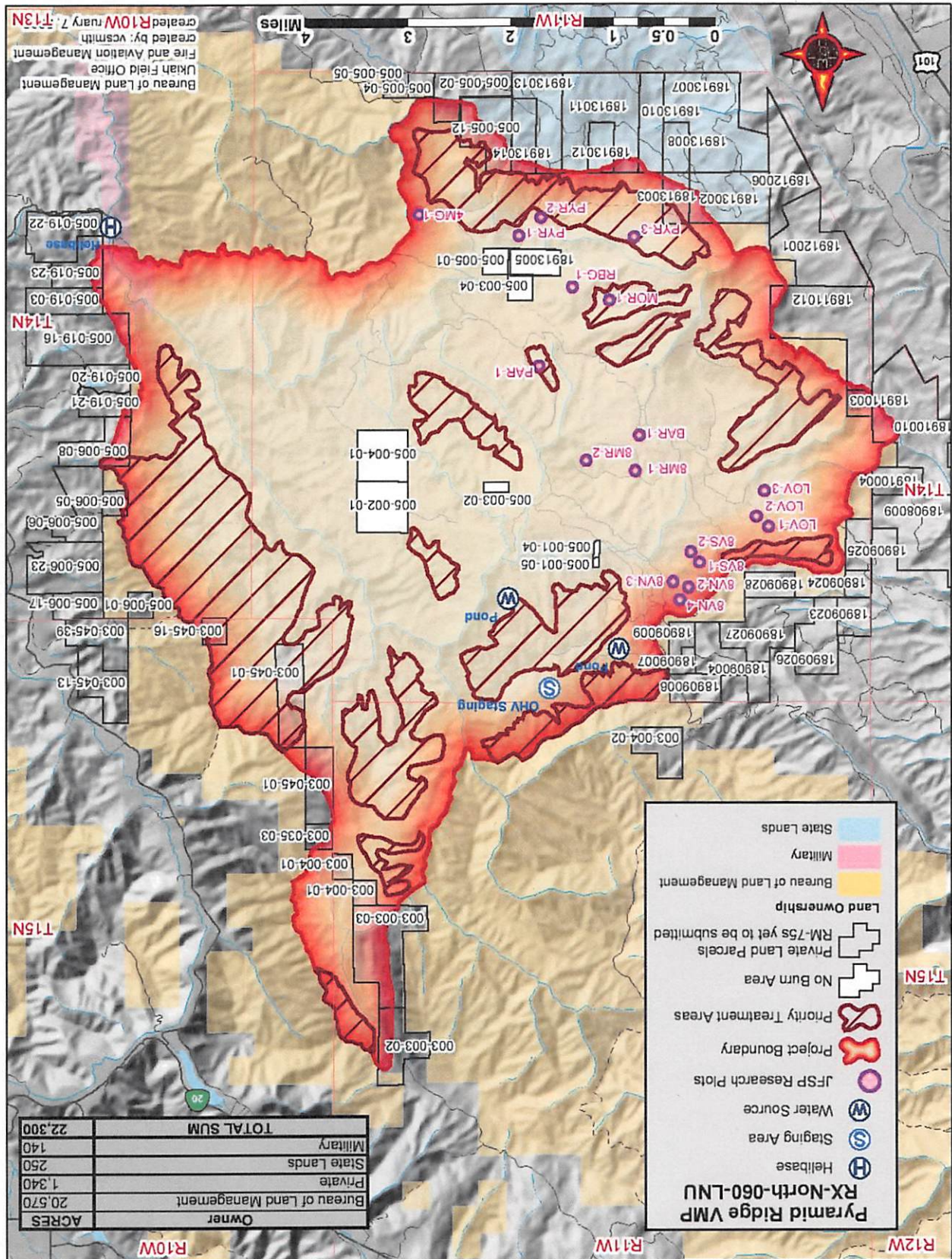
### **Pyramid Ridge VMP / Knob Cone Pine Study**

This project is much like that of Red Mountain and is also funded by the Joint Fire Sciences Program. The current research, involving CDF, BLM, and the University of California at Berkeley, includes treating 18 plots, 3-10 acres in size, of knob cone pines that are dying off for an unknown reason. The treatment was to take place in both the Spring & Fall of 2005, the last funded year, and to include burning 3 plots of standing knob cone pine, burning 3 plots of cut knob cone pine, and cutting and letting rot 3 of the plots. It was impossible to perform the Spring burns due to very wet weather, but the Fall burns were accomplished in November 2005. CDF is responsible for all this burning.

The Pyramid Ridge project also gives an opportunity to conduct broadcast burns of brush to facilitate perimeter control and fuel reduction throughout the fire corridor on Cow Mountain between Ukiah and Lakeport to the east. The total proposed project size is approximately 22,300 acres spread across Mendocino and Lake Counties.

### **North Cow Mountain VMP (2009)**

The project will develop a burn plan for the northern area of Cow Mountain under CDF's Vegetation Management Program. The burn plan will be implemented in subsequent years. Fuel breaks in the fire-prone upper Mill Creek Road area may be part of this project.





## **FIRE SAFE COUNCIL COMMUNITY MEETINGS IN BATTALION 3**

The Fire Safe Council sponsored three productive outreach meetings during March and April 2005, in Ukiah, Hopland, and Redwood Valley.

### **Ukiah Community Meeting**

The great majority of the 33 attendees at the Ukiah meeting live on Robinson Creek Road, southwest of Ukiah, and all the Assets at Risk forms completed by attendees were from this area. This turnout was due to the energetic efforts of Robinson Creek residents Lillian Hoika and Sheryl Greene, who continue to spearhead Fire Safe work in the area. Todd Derum, at that time CDF Battalion 3 Chief, and Stephen Smith, District Conservationist with the Natural Resources Conservation Service, ably co-facilitated the meeting.

The main concern of this group is basic: surviving a wildfire. Their one primary road and its offshoots, which follow Robinson Creek up a narrow canyon, is in places barely one lane wide. Widening the road would be extremely difficult: in many places the road could not be widened without dynamiting the steep rock hillsides that already litter the road with rocks. Ideas given at the meeting are these, in attendees' words:

- Vegetative fuels reduction needed (14 responses): brush along roads and around homes, dead trees throughout the area, some resulting from past ice storm; need for control burns and chipping to dispose of excess vegetation
- Neighborhood awareness of strangers on roads and youth partying along creek
- Education re: fire safe building construction, existence of hazardous materials, and safe use of burn piles
- Community notification / phone tree system in event of wildfire
- Evacuation plan and use of safety zones: location of escape routes, creation of turnouts along narrow roads, identification and creation of safety zones for situations where evacuation is impossible, identification of persons who would need help escaping from their homes
- Fire suppression: creation and identification of water supply, and assurance of CDF air tanker availability

Subsequent to the meeting, Ms. Hoika requested that CDF personnel drive their roads and recommend the best course of action to save lives in a wildfire. Captain Brian Kornegay did so, and at an educational meeting on Robinson Creek Road in May 2005 he confirmed the residents' intuition that creation and utilization of safety zones throughout the area would be their best course of action. Upon the request of Ms. Hoika, and with input from CDF personnel, the MCFSC prepared an information sheet on creating such safety zones.



Recognizing that communication and education are crucial, Ms. Hoika and Ms. Greene are creating a phone tree for the Robinson Creek canyon and have distributed fire safe literature to all residents. In addition, Bill Stambaugh has created a detailed map showing road addresses and fire and flood history, for use by residents and emergency personnel.

### **Hopland Community Meeting**

Attendance was light but enthusiastic, with McNab Ranch and County Road 110 residents present, at this meeting hosted by Steve Leonard, Hopland's Assistant Fire Chief. As is true in most of the county, a primary concern is roads too narrow to allow residents to exit while fire equipment is entering. McNab Ranch, northwest of Hopland, has been the location of numerous wildfires and is one of the county's primary wildfire concerns due to its difficult terrain, precipitous roads, and the prevalence of light, flashy fuels. Other concerns and ideas:

- Vegetation: Need to clear brush and overhanging trees near structures; need financial assistance for this work.
- Roads: Clear brush next to roadways, protect wooden bridges, and decide whether to evacuate or shelter in place.
- Communication: Create communication network or phone tree, know who and where neighbors are, watch for persons tossing cigarette butts from cars, and educate residents about fire danger.
- Fire suppression: Keep CDF air tankers and helicopters available, and possibly have a fire engine located on McNab Ranch.
- Water supply: Develop surplus water for fire protection, and make sure firefighters know locations of ponds, tanks, and hydrants.

Notable regarding the Hopland area is that two grant proposals have been developed, one of which was already successful: (1) The Fire Safe Council has been awarded \$22,250 of BLM funding for defensible space clearing and a fuel break to be performed in 2006 on the Hopland Band of Pomo Indians lands southeast of Hopland. (2) The Council has requested funding for road signage and mapping for McNab Ranch.

### **Redwood Valley Community Meeting**

"Small but mighty" describes both the group attending this meeting and the fruits it has borne. Hosted by Chief Tom Hession of the Redwood Valley/Calpella Fire District, the group included a Registered Professional Forester and County Planning Commissioner, a retired County Sheriff, several young firefighters, and other key fire-conscious residents.

Two areas were identified as at greatest risk of loss of life in a wildfire. Cave Creek Ranch is a remote subdivision off Tomki Road beyond the northern end of the valley. Tomki was the

main road between Ukiah and Willits before Highway 101 was built, and the bandit Black Bart reportedly ambushed many a horse-drawn buggy along its treacherous curves! The paved portion of Tomki Road ends six miles out Tomki Canyon, at the entrance to the lower portion of Cave Creek Ranch. Thereafter the road features numerous rocky stream crossings with no bridges. Even in summer when the stream is dry, a very sturdy vehicle is necessary to navigate the road. Evacuation is therefore a major concern.

The second area at serious risk is Greenfield Ranch, located in the hills west of Highway 101 and spanning both the Redwood Valley and Ukiah Valley Fire Districts. Its remote location, flashy fuels, and sparse roads also make for high fire danger and a potential evacuation nightmare. A final need for the Redwood Valley area was identified as “personnel and funds for the fire department.”

Two activities resulted from this meeting to address these concerns.

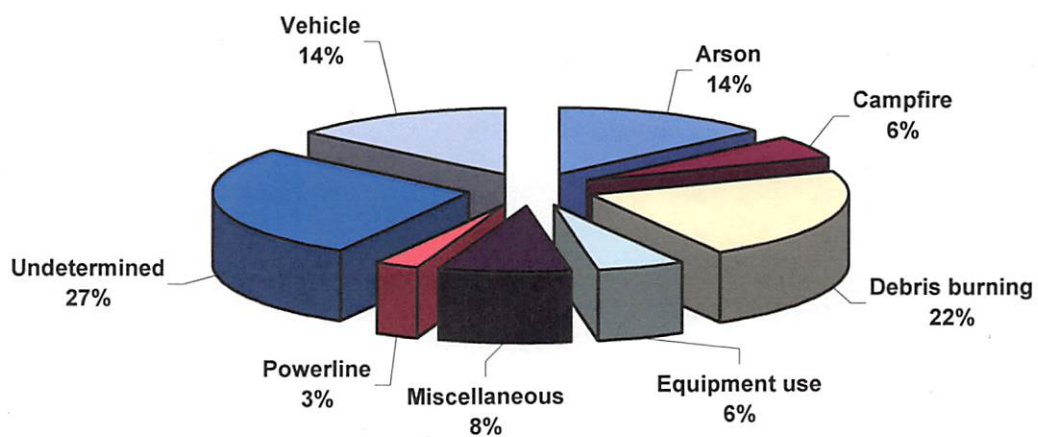
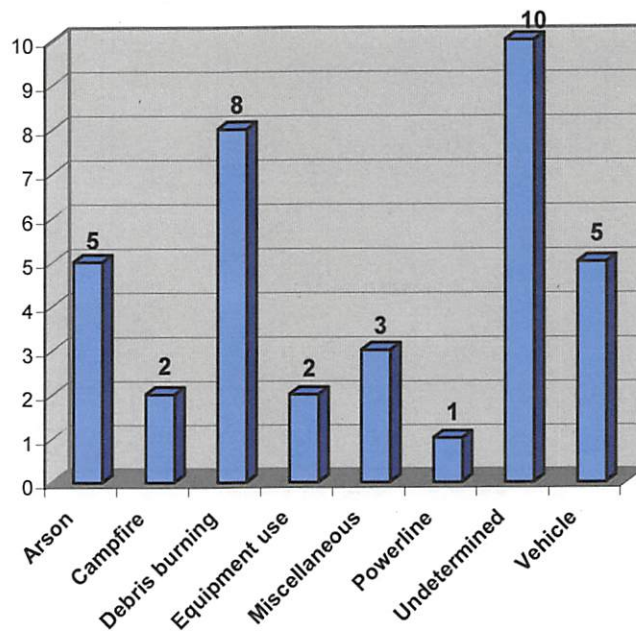
- (1) Responding to the stated need for funds, local musician Paula Samonte, in conjunction with the Fire Safe Council, produced and presented a jazz concert in June to benefit the Redwood Valley/Calpella Fire District. Ms. Samonte successfully solicited donations to cover all the concert’s expenses, and clear ticket sales proceeds of over \$1,500 were presented to Chief Hession at the annual Redwood Valley Fire District Barbeque in July.
- (2) Recognizing the severe evacuation issues, Chief Hession and then-CDF Battalion Chief Bob Rodello overflowed Cave Creek and Greenfield Ranch to identify where safety zones might be created. The chiefs made plans to prepare these areas, educate residents about the realities of evacuation and the locations of the safety zones, and sponsor an event during which residents would practice traveling to their safety zones.

Other concerns, ideas, and priorities identified by Redwood Valley attendees are:

- Water: Need increased water storage for fire suppression
- Fuels: Need vegetation reduction in high hazard areas – and funding to perform it
- Education: Need to instruct residents – including youths on motor bikes -- about fire danger and ignition hazards, to post more signs indicating high fire hazard, and to organize residents to join together and implement fire safe measures

### Battalion 3 Fire Cause 2004

Total Fires: 36





## **CDF BATTALION 4 / PLANNING ZONE 1: LAYTONVILLE**

The Laytonville Battalion encompasses approximately 650 square miles, or about 416,000 acres, of State Responsibility Area in the northwest portion of Mendocino County. The Battalion has two major highway corridors: State Highway 1 runs through the northwest corner of the Battalion, where it intersects U.S. Highway 101; and Highway 101 runs the entire length of the Battalion, a distance of 42 miles.

CDF operates two 2-engine fire stations within the Battalion, at Laytonville and Leggett. Year-round fire protection in the Battalion is provided by four volunteer departments: Long Valley (Laytonville), Leggett Valley, Piercy, and Whale Gulch. The Whale Gulch Fire Department is located within Mendocino County but is dispatched by the CDF Humboldt-Del Norte Unit because the road to its location is in Humboldt County.

The Battalion includes eight communities of various sizes, with two high schools and three grade schools. Services in the communities range from full time to seasonal -- restaurants, motels, fuel, and grocery stores -- to no services in some areas. Several private camps are occupied primarily during the summer months. The State Parks System operates two campground facilities, one of which is classified as a wilderness park, plus three other day use areas. The Nature Conservancy has a large holding known as the Coast Range Preserve in the Branscomb area. There are several BLM holdings in the Battalion, most of which require modified suppression action plans.

### **COLLABORATION**

Three community meetings sponsored by the Mendocino County Fire Safe Council, the Long Valley Fire Protection District, Leggett Valley Fire Protection District, Piercy Volunteer Fire Department, and CDF were held in April 2005 to gather input from community stakeholders. Attendees identified several areas of concern throughout the Battalion, including but not limited to defensible space clearance around structures and power lines, water source development, road signage, home addressing, fire prevention education, and vegetation management/fuel reduction. More details about these meetings are at the end of this report.

The larger Wildland Urban Interface (WUI) areas identified during these meetings include Bear Pen subdivision, Cooks Valley, Pepperwood Springs subdivision, Ebert Lane, Camp Saint Michael, Bell Springs Road, Cherry Creek subdivision, Twin Pines Ranch, Black Oak Ranch, Spy Rock Road area, Wilderness Lodge, Ten Mile Creek, Fox Rock Road, and Mulligan Lane. A complete list of Battalion 4's identified WUIs is found in Appendix B.

## **LOCAL FIRE PROBLEM**

Fires caused by debris burning are a significant problem in Battalion 4. When a debris fire is discovered, a fire report is prepared, even if the fire has not escaped control, when these conditions exist: no permit was obtained, it is a no-burn day, or there is any other kind of non-compliance with burning regulations. An increased effort by Battalion personnel to inform the public of debris burning regulations will be used to reduce these fires. Fires caused by equipment use are also a problem. Battalion personnel conduct public education on this subject, but such fires will probably continue due to the large amount of outdoor equipment use in the Battalion.

Arson-caused fires increased from 2% of all the Battalion's wildfires in 2002 to 17% in 2003. The Unit's Fire Prevention Bureau is aware of this and investigates all fires. Playing with fire is also on the rise within the Battalion. Public education programs will address this, and if needed, the Unit's Fire Prevention Specialist will be asked to assist in Fire Prevention school programs on this issue. Local and state firefighters also need to be trained in dealing with juvenile fire-setters.

Although logging is decreasing, the fire threat relative to logging remains, due to the buildup of logging slash and the lack of access to the slash-covered areas due to road closures. Fires caused by the railroad have ceased because the railroad is not operating due to winter storm damage several years ago. When the railroad is again in service, a fire prevention and inspection program will need to be implemented.

The future outlook for Battalion 4 is for increased tourist traffic and more rural subdivisions. As these subdivisions expand, the need for prevention and suppression of debris, equipment, and vehicle fires will also increase, requiring greater public awareness of fire hazards.

## **PAST AND ONGOING PROJECTS**

The Laytonville Battalion has had nearly ten Vegetation Management Program (VMP) projects in the works since the early 1990's, but most have been canceled due to expired contracts and budget problems. These were to have been primarily broadcast burning projects in cooperation with local stakeholders, involving from a few hundred to a few thousand acres. The most recent projects within the Battalion are the Sinkyone VMP and the Cahto Indian Reservation thinning project.

The Sinkyone VMP is a joint project of CDF and the California Department of Parks and Recreation, located at the Sinkyone Wilderness State Park, in the far northwest corner of the Battalion. The primary objective is to return fire as a natural element in a marine terrace ecosystem. Benefits will include the control of exotic plant species, reduction of fuel

loading, increased forage for Roosevelt Elk herd, and maintenance of native grassland plant species. A lack of VMP funding has postponed the project, but the Department of Parks & Recreation is seeking funding to perform it in the Spring of 2006.

The Cahto Tribe has obtained grant funding to conduct a tree-thinning project immediately surrounding the tribal residences. The primary objective is to make a more productive forest through thinning, and a secondary benefit is the reduction of forest fire fuels, providing additional defensible space. More funding is needed to complete this project.

## **FUTURE PROJECTS: EDUCATION AND ROADSIDE FUEL BREAKS**

During the Fire Safe Council community meetings, as was noted above, stakeholders identified the need to increase public fire prevention education, addressing and road signage awareness, defensible space awareness, and water source development throughout the Battalion. Currently each local fire department and CDF station's personnel conduct separate and joint fire prevention education programs at local schools, road association meetings, and community events. During these education programs, strong emphasis will now be placed on the identified target areas. Funding is needed for local and state fire departments to provide up-to-date educational materials to the public; and all fire personnel in the Laytonville Battalion need additional fire prevention training.

Fire Safe Council meetings also identified the need for fire road access clearance and fuel reduction/shaded fuel breaks in several WUI areas. In each of these locations, overgrown brush and young saplings cause a safety hazard for both fire crews trying to enter the area and residents trying to leave in a wildfire emergency. For each evacuation route listed here, projects need to be instituted to create shaded fuel breaks extending 50 feet on both sides of the roads, by removing understory brush and trimming up trees to remove ladder fuels.

- Spy Rock Road (including Registered Guest Road, Iron Peak Road, and Blue Rock Road) is inhabited by approximately 2,000 people living in various types of homes.
- Ten Mile Creek has approximately 200 residents.
- Bear Pen subdivision contains 18 homes.
- Ebert Lane is a narrow road accessing 11 homes; its vegetation includes not only brush and saplings but also timber.
- Pepperwood Springs subdivision has approximately 20 homes.
- Cherry Creek subdivision, which currently contains about 30 homes, is becoming a very popular area for new construction.
- Mulligan Lane contains areas of brush that need to be removed.
- Bell Springs Road, a major artery, has many heavily overgrown areas.

The lack of home addresses and road signage is a huge problem throughout Battalion 4. This is due in part to the vast amount of marijuana cultivation by persons who wish their addresses



to be unknown. During public education programs, the benefits of proper addressing and road signage for both fire and medical emergencies will be strongly emphasized.

Two sets of fire prevention signs remind the general public of their fire prevention obligation and burning regulations. Each time a burn permit is issued, a fire prevention message is presented. Battalion personnel will continue Public Resources Code section 4291 and 4492 inspections of structures and power lines in each community.

## **FIRE SAFE COUNCIL COMMUNITY MEETINGS IN BATTALION 4**

### **Laytonville**

Twenty-five persons crowded into the Laytonville Fire Department's hall on May 2, thanks to Battalion Chief Larry Grafft, who arranged and advertised the meeting on short notice. Many of the attendees identified their homes as being on ranches: Cherry Creek, Twin Pines, Twin Rocks, Black Oak, and Starlight/Hunt. Others listed roads, road associations, or subdivisions, many of them identified above: Branscomb, Registered Guest, Woodman Canyon, Fox Rock, Road 307, and Cahto Meadows. Spyrock and Bell Springs roads, though unpaved, are major arteries to the northeast of Laytonville. Branscomb Road runs west from Laytonville to the town of Branscomb, which is centered around the family-owned Harwood Products lumber mill.

Residents identified their assets at risk as homes, barns, the Eel River and its fish spawning grounds, wildlife, scenic views, orchards, forests, and rangeland. They listed these ideas and concerns:

- Clear brush (11 responses) from homes, PG&E transformers, road edges, and overcrowded forests. A chipper is needed to help this work. One attendee summed up the entire county's need: "Remove fuel and plan for the worst."
- Expand water supply: Build more ponds and tanks.
- Prepare to evacuate: Develop emergency exit roads and second ways out. Plan how to notify persons who are off the "grid" and have no telephones.
- Create maps showing structures, power lines, and water supplies: Put such maps in lockboxes at entrances to populated areas; install road signs stating number of homes/persons out each road in fire-prone areas.
- Educate both full-time and weekend/part-time residents
- Perform controlled burns
- Be self sufficient; create a community pool of emergency fire tools; allow Cal Trans road work only with a fire observer present; repair equipment that presents a fire hazard; and prepare for evacuation of animals.

## **Leggett and Piercy**

Located in the far northwestern portion of the County, these small communities are heroic in their efforts to provide emergency services under difficult circumstances and with extremely limited funds. Located as they are on Highway 101 – and Leggett is at the intersection of Highways 101 and 1 -- their fire departments respond to many grisly auto accidents whose patients are passers-through and from whom costs are not recovered. Due especially to the struggles of these departments, as explained in Chapter 2, the Fire Safe Council wished to pay special attention to their residents' needs.

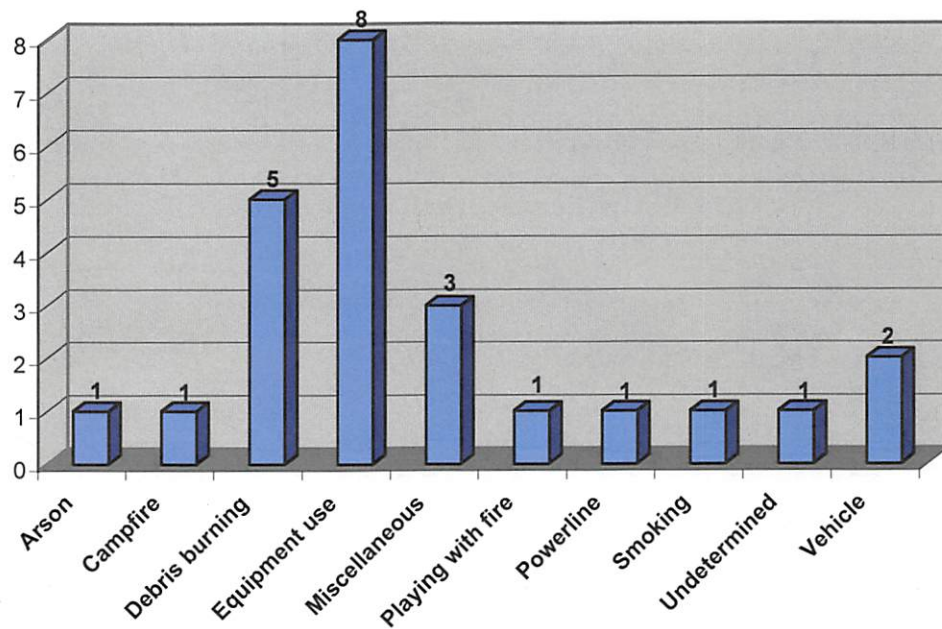
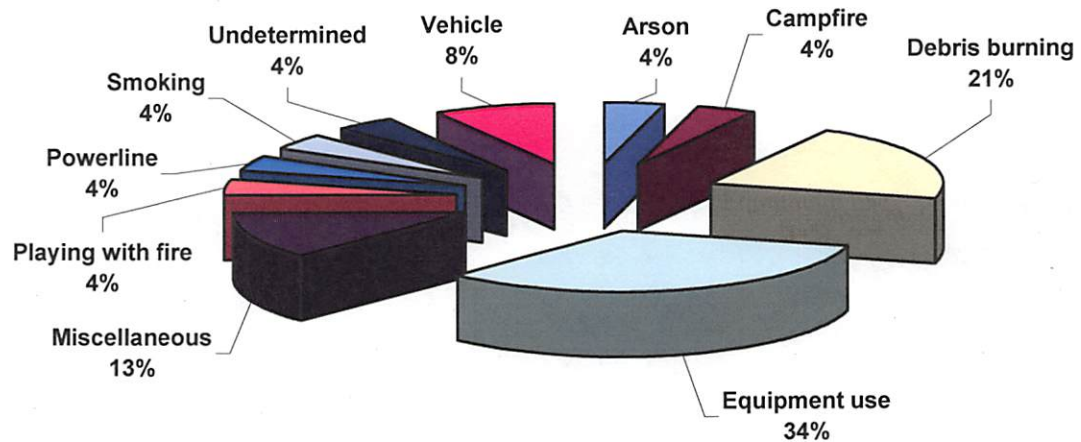
Two community meetings were held at the Leggett School cafeteria, hosted by local firefighter/EMT Cliff Skaggs. (The second meeting was held to draw more people.) Attendees were predominantly fire personnel, including Piercy Chief Bob Kirk, Leggett Chief Ely Reighter, and CDF Battalion Chief Larry Grafft. Chiefs Kirk and Reighter, intimately familiar with their areas, provided precise and thorough details on the locations of homes and Intermix communities.

All attendees agreed that local assets at risk include the historic Peg House, tourist attractions including the huge redwood Drive-Thru Tree, the Usal area and Sinkyone Wilderness State Park, Standish-Hickey State Recreation Area, and events such as the Redwood Run motorcycle tour and Reggae on the River, a concert which attracts thousands to the Eel River each summer. The CalTrans yard in Leggett was named as a hazardous materials site. Firefighter Christina Bell of Leggett requested Fire Safe materials for her grade school students and inspired MCFSC staff to pursue a county-wide educational effort to reach parents through their children. Further ideas:

- Educate residents, including children; enforce fire codes; contact the people at highest risk and ask for their cooperation.
- Reduce vegetation, especially around homes and along roads, where people throw out cigarettes; make tailgate party areas safe for large events.
- Prepare water for fire suppression; identify water locations on address posts.
- Establish communication links between residents and fire agencies; make pre-plans for at-risk communities.
- Improve roads and road signs; evacuation routes are very limited.
- Obtain better funding from the county for emergency services.
- Recruit volunteer firefighters.
- Equip pickup trucks with slip-on water tanks, radios, and first aid supplies.
- Provide incentives for residents to comply with wildfire-related regulations.

## Battalion 4 Fire Cause 2004

Total Fires: 24





## **CDF BATTALION 5 / PLANNING ZONE 3: BOONVILLE**

Battalion 5 encompasses 674 square miles or 431,393 acres and 230 miles of state and county roads, and is the 10<sup>th</sup> largest Battalion statewide, according to 1964 Fire Plan data. Two major highways within the Battalion bring tourist traffic from the Bay Area to the north coast: State Highway 128 forms the northern boundary of the Battalion, and State Highway 1 defines the western boundary. Vegetation within the Battalion varies from dense redwood/Douglas-fir forests to grassy oak woodlands.

The Battalion includes one city, Point Arena, and nine communities of various sizes: Gualala, Anchor Bay, Irish Beach, Manchester, Elk, Yorkville, Boonville, Philo, and Navarro, with two high schools and four grade schools.

CDF fire protection for the Battalion is provided by two Stations: Boonville (two engines, one dozer) and Point Arena (one engine). Additionally, four local government departments -- South Coast Fire Protection District, Redwood Coast Fire Department, Anderson Valley Fire Department, and Elk Volunteer Fire Department -- provide structure protection for their communities, as well as mutual aid to CDF for wildland fire protection. Redwood Coast Fire Department provides protection for the City of Point Arena. The community of Irish Beach, which formerly provided its own fire protection, is now covered by Redwood Coast while the possibility of permanent annexation is explored. Greenwood Ridge Fire Company, a private brigade within the Elk Volunteer Fire Department's sphere of influence, provides an additional protection resource and is available for mutual aid.

The Battalion has one lookout, Cold Springs, which was closed in 1994 but has been intermittently reopened during periods of high fire danger and lightning storms. Cold Springs Lookout is listed in the National Historic Lookout Registry and has been identified in CDF's Management Plan for Historic Preservation.

The outlook is for increased tourist traffic and rural housing in single increments and small subdivisions. As the minor subdivisions expand, an increasing fire problem will exist in both the prevention and suppression of fires. Logging, which formerly provided the area's major economic resource, is decreasing due to environmental concerns, economic factors, and regulatory changes. However, future fire control problems remain a concern, as areas that are logged have an increase in logging slash and possibly a lack of access due to road closures. Areas where logging is not occurring may have a higher density of live and/or dead vegetation as well as an increase in poor or limited access. The Battalion's overall fire hazard potential will likely increase due to increases in tourism, traffic, off-road recreation, camping, and rural subdivision development in the Wildland-Urban Interface.

Vineyard conversions are still occurring, primarily within the oak woodlands. These conversions create greenbelts (fire fuelbreaks) on the valley floor, along the lower slopes surrounding the valley, and now reaching the upper ridges.

Forty-eight fires were reported within the Battalion in 2004. Five of these consumed 9 acres and the remaining fires burned less than ¼ acre each. Debris burning (17) was the leading cause of fires; the five-year average for debris burning is 15 fires. Campfires (6) were the second leading cause. In 2004, for the eleventh year, a countywide burning ban was in effect from June until November.

Fire Prevention signs -- two sets in the Battalion -- remind local residents of their fire prevention obligation and inform summer residents, tourists, and locals of the need for fire permits. A fire prevention message is presented to the public directly through the in-person issuance of burning permits.

## **FIRE PREVENTION ACTIVITIES**

- Display and information booth at the Mendocino County Fair and Apple Show
- Participate in the Mendocino County Fair parade
- Participate in school programs with Smokey Bear emphasizing fire and home safety
- Fire Prevention and Safety at the Boy Scouts of America camp in Navarro
- LE-38 inspections of residences and inspections of power lines
- Roadside Fire Prevention signs
- Burn permits issued in person with awareness and safety training given to permittees
- Joint educational outreach efforts with Fire Safe Council

## **LITTLE MILL CREEK SHELTERED FUEL BREAK**

Battalion 5's primary vegetation management effort at this time is the Little Mill Creek Sheltered Fuel Break, a project for which the Mendocino County Fire Safe Council obtained \$35,000 of BLM funding. Work began in Spring of 2005 and should be finished by Spring of 2006. A description of the problem and solution follows.

The ridgeline of the Little Mill Creek drainage is the high divide between two forks of the Navarro River. It also forms a portion of the northerly ridge that defines the western end of Anderson Valley. The ridge is, practically speaking, the dividing line between thousands of acres of timberland to the north and the populated valley lands to the south. In 1931, the Comptche fire, which originated in the Big River drainage to the east and was pushed by strong northeasterly winds, entered the valley near this area. That fire burned more than 31,000 acres and destroyed twelve residences at a time when the area was sparsely populated.

Several fires have occurred in the same area within the last two decades, ignited by logging

activities, lightning strikes, or campers along the North Fork of the Navarro River. The northerly timberland has been logged several times, resulting in a dense canopy of young Douglas-fir and redwood. Tanoak has also overgrown the area due to the past practice of taking the softwood and leaving the hardwood. Currently, the ridge is densely covered with brush, young saplings, and third growth Douglas-fir and redwood. The vegetative cover has nearly overgrown the old logging truck road that runs along the ridge. In even moderate fire conditions, it is questionable whether fire crews could attempt a direct attack on a fire approaching the ridge. The old logging landings have also become so overgrown that they would not provide adequate safety zones.

This project is creating a sheltered (or “shaded”) fuel break along the 2.5 miles of ridge road from the Nash Mill Road to the Holmes Ranch Road by doing traditional understory removal and trimming up ladder fuels on the overstory trees for an average distance of 50 feet on either side of the ridge. The goal is to reduce the fuel load along the ridge to the extent that fire apparatus could either attempt a direct attack or initiate a defensive firing operation. Additionally, existing landings are having old cull log decks removed by burning and the perimeters treated in a similar manner as the ridge top, to create viable safety zones. Upon completion, this project will significantly increase firefighters’ ability to keep a fire in the timberland from entering the populated valley lands.

This project was scheduled to begin in the fall of 2004, but, due to a delay in funding, began in March 2005. CDF hand crews cleared and burned all vegetation 4” and smaller and cut larger stems for firewood during Spring of 2005. During fire season, crews utilized a chipper. In winter of 2005-06, an arm-mounted mechanical masticator which works from the existing road will be utilized. The project was designed and is being managed by Colin Wilson, Anderson Valley Fire Chief. Adjacent property owners are extremely cooperative and appreciative of this work.

## **FIRE SAFE COUNCIL COMMUNITY MEETINGS IN BATTALION 5**

The Mendocino County Fire Safe Council held two community meetings in Battalion 5 early in 2005, at Boonville and Point Arena. The meetings were well attended and several priorities for future fire prevention work were identified. At Boonville, Anderson Valley residents were interested in improved access and signage along major secondary roads. At Point Arena, South Coast respondents were interested in additional fire prevention education and fuel reduction projects, both around structures and throughout the wildland.

### **Boonville / Anderson Valley Community Meeting**

Invited and hosted by Chief Colin Wilson, 22 persons gathered in the Boonville fire station on March 22 for the first community outreach meeting to gain data for this Plan. Attendees hailed from the Nash, Holmes, Perry Gulch, and Sky Ranches, as well as Manchester, Clow



Ridge, and Peachland Roads, all of which are Wildland Interface and Intermix areas. Residents stated these concerns and suggestions:

- Provide improved access and signage along secondary roads, prepare for evacuation, protect wooden bridges, and resolve address inconsistencies
- Develop, increase, and identify water sources for fire suppression, including ponds, tanks, and hydrants fitted for fire engine refills. The fire department is very proactive in encouraging these projects among vineyard owners, ranchers, and homeowners.
- Remove vegetation around homes and organize volunteer cleanup for elderly persons
- Remove vegetation along roads, including the eucalyptus trees along Highway 128 near Peachland Road
- Install additional fire prevention signs along roads, especially to address the issue of lit cigarette butts thrown from cars
- Assure continued funding for firefighting air tankers and helicopters
- Provide wood stove maintenance and inspections

#### **Point Arena / South Coast Community Meeting**

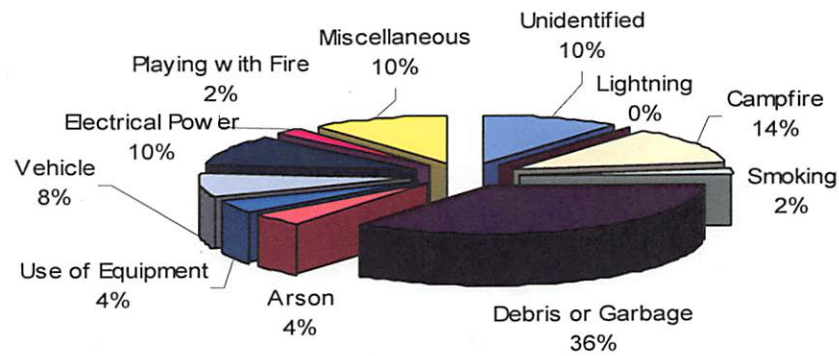
Volunteers from the South Coast Community Emergency Response Team (CERT), formerly the South Coast Neighborhood Emergency Services Team (NEST), were in abundance at the meeting held April 25 in the Point Arena Veterans' Hall. Led and trained by volunteers Michelle Staples and Ken Reynoldson, these people are well aware of the full spectrum of emergency situations. Ms. Staples is especially proactive in community disaster planning and preparedness, including evacuation of large animals. Other eminent attendees included Mayor Leslie Dahlhoff and OES Coordinator Annie LeRoy of Point Arena, South Coast Fire Chief Leighton Nelsen, Redwood Coast Fire Chief Mike Suddith, Julie Verran of the Independent Coast Observer newspaper, and others from both Point Arena and Gualala. Special thanks to Ms. Staples and Ms. LeRoy for advertising and hosting the meeting.

Although the ocean moderates the weather immediately on the Coast, wildfire is still a distinct possibility. Mayor Dahlhoff reports that the coastal City of "Point Arena was destroyed by a fast-moving forest fire in the 1940's." And, of course, areas just a few miles inland are nearly as hot and dry as the inland valleys. Concerns include the following:

- Protection of water and electrical power supply
- Preservation of rare plants, parks, and historic districts
- Preparation for evacuation of large animals
- Protection against hazardous materials located at the Hay Industrial Park
- Possibility of landslides blocking limited escape routes
- Desire for more fire prevention education and firefighter training
- Need for pre-identified evacuation routes

## Battalion 5 Fire Cause 2004

Total Fires: 48



## **CDF BATTALION 6 / PLANNING ZONE 4: FORT BRAGG**

Battalion 6 encompasses approximately 532 square miles, or about 341,000 acres, with 240 miles of State and County roads, plus an estimated 1,305 miles of private dirt roads and 159 miles of railroad. The battalion has two major highways which bring tourist traffic to the north coast. State Highway 1 spans the entire west section of the battalion along the coast and intersects with State Highway 20, then continues north and intersects with US Highway 101 at Leggett. Highway 20 connects Highway 1 to Highway 101 and links the cities of Fort Bragg and Willits.

Geographically, the battalion boundaries are as follows: starting at the northwest corner from the Pacific Ocean near the town of Rockport, it runs south along the coast to the Navarro River at Highway 1 and Highway 128. It then runs east along the river and Highway 128 about 10 miles to Flynn Creek Road, then northeast to State Highway 20, then north to Sherwood Peak. It follows Sherwood Ridge about six miles continuing northwest, following mostly along ridge lines to the Pacific Ocean. It finally intersects at a point just south of the town of Rockport, a distance of about 25 miles, forming the northeastern boundary.

Battalion 6 includes two CDF Fire Stations: the Fort Bragg Station (Battalion Headquarters) with one fire engine, and the Woodlands Station east of Mendocino, also with one engine. The fire protection community includes five local government departments including Fort Bragg Fire (paid and volunteer), which is the only LRA jurisdiction within the Battalion. The balance of the fire districts are all volunteer including Mendocino, Albion/Little River, Comptche, and the non-tax-supported volunteer department at Westport. These entities provide structure protection, emergency medical services, and rescue response for their communities as well as mutual aid on wildland fires. Mendocino Coast Hospital provides ground ambulance service, and CALSTAR (Ukiah) and REACH (Lakeport and Santa Rosa) provide helicopter emergency medical services (EMS). The U.S. Coast Guard provides EMS and water rescue from Noyo Harbor in Fort Bragg and can provide additional helicopter support from Eureka.

Seven communities of various sizes include Albion, Caspar, Comptche, Fort Bragg, Little River, Mendocino and Westport, with one community college, three high schools, two junior high schools, numerous private and public grade schools, one hospital, five radio stations, and one television station. There is a combined census survey of 19,529 in total population. Although there are major commercial timber holdings including Mendocino Redwood Company, Hawthorne/Campbell, and Pioneer Resources LLC, the battalion has evolved from what was formerly a lumber-orientated community towards a present-day seasonal vacation and recreational community. Services range from full-time to seasonal or part-time employment, for limited logging, construction, restaurants, motels, fuel services, grocery stores, and tourist attractions.



Included in the battalion is Jackson Demonstration State Forest (JDSF), purchased in 1947 from the Caspar Lumber Company and the largest State Forest at 50,200 acres. JDSF is a public use area excluding motorized vehicles and includes campsites and day use areas. The forest is a popular area for hiking, biking, hunting, horseback riding, swimming, and picnicking, and is visited by over 40,000 people annually.

The California State Parks and Recreation Department's Mendocino District is headquartered within the battalion at Russian Gulch State Park. Seven campground facilities and numerous state beaches and recreation areas are in the battalion. This includes the Mendocino Woodlands Campground which is contracted to private management with occupancies of up to 500 per day. The State Parks system has increased in size through recent acquisitions which include 7,300 acres along Big River to the coast in 2003. The coastal area at the north end of Fort Bragg known as Glass Beach, and the Point Cabrillo Lighthouse and surrounding area have also been transferred to the State Parks system.

## **BATTALION 6 FORECAST**

The outlook is for increased tourist traffic and more residents in additional rural homes and subdivisions. The Georgia Pacific Lumber Mill, previously the largest business and employer in Fort Bragg, has closed and the site is for sale. The City of Fort Bragg is now in community development planning for the site, which includes 400+ acres of prime coastal real estate. Logging continues to decline with more timber harvest plans on smaller acres. Projected fire hazards and at-risk assets will continue to grow due to the changing demographics of the area. As rural development continues and subdivisions expand, an increasing fire problem will exist in both preventing and suppressing fires. The points below identify some issues that will increase the complexity of the future fire environment.

- The Mendocino County Planning Department has received record numbers of building permit applications for three successive years – currently approximately 1,200 per year.
- Response times outside developed communities can be quite extended, and resources are limited. The topography of the battalion, in conjunction with the winding, slow, and limited road system, are contributing factors to response times.
- Developed water resources are sparse with limited availability and accessibility in outlying areas.
- The increased population in rural areas will have an impact on, and strain the already limited resources in, the area. This will potentially result in increased fire starts as well as medical aid and rescue response requests.
- Increased public land use including off-road recreation and camping will result in additional potential for fire as well as medical aids.
- Property addressing and access continue to be marginal and inconsistent throughout Mendocino County, resulting in increased dispatch and response times.

- The buildup of logging slash and overgrowth have increased due to road closures and declining access as timber plans have closed.
- Population growth will also increase equipment use and debris burns, increasing the potential for fire starts and control burn escapes.
- Lack of awareness and education regarding fire safe planning by persons moving from city to rural environments regarding fire safe planning manifests itself through poor preparation and ultimately increased risks.

## **FIRE HISTORY 2004**

Battalion 6 fire history for 2004 includes a total of 38 fires and 64 acres burned. Children playing with fire was the leading cause, resulting in 17% of the starts. The balance of causes and frequencies are depicted in the chart at the end of this section.

## **FIRE PREVENTION EDUCATION ACTIVITIES**

- Continuing participation and interaction with the local schools will be a major component of the Battalion 6 prevention and education program. This focuses on youth education and prevention as well as providing a conduit to parents for prevention information and fire safe planning. The program has been successful to date and has been well received by the community.
- Battalion personnel regularly participate in community events including parades, fairs, and barbeques utilizing Smokey Bear, fire apparatus, and booths to distribute prevention and education materials including fire safe pamphlets. The events also provide opportunities for personal public “one on one” contact for adults and youth alike relating to prevention, education, career, and general CDF-Fire information.
- The battalion maintains and annually updates roadside fire prevention signs. Mendocino County Fire Safe Council contact information will be included on new signs.
- Fire Safe inspections continue in the community with LE-38 inspections of residences and power lines. The battalion will interface with local government fire departments and the Fire Safe Council to identify communities at risk to be targeted for focused inspection programs.
- The annual issuance of Burn Permits including LE-63 (campfire), LE-5 (dooryard), and LE-7 (project burn) are used as opportunities to increase public awareness and conduct training in the proper and safe use of fire.

- The battalion will continue to participate in public outreach meetings sponsored by the Fire Safe Council, to assist in education, and to identify public concerns regarding prevention or future community projects.
- The battalion will continue to co-sponsor, with timber stakeholders, the annual timber “industry meeting” to update and exchange contact information, identify available resources, and identify logging operations or major projects occurring within timber holdings.

## **FIRE PREVENTION PROJECTS**

Battalion 6 is currently participating in a 96-acre fuels reduction and obstruction clearance project at the Little River Airport, funded through the Bureau of Land Management. CDF-Fire is providing fire crews and fire engine support when needed, for the removal of invasive vegetation and trees.

The battalion has a priority project to update interagency fire plans with the Department of Parks and Recreation. The goal is to identify and update personnel, resources, assets at risk, modified suppression areas, and training needs between the agencies for fire suppression and prevention. With the significant expansion of the Department of Parks and Recreation’s State Park System -- and given the fact that CDF Fire has Direct Protection Authority for the State Parks -- the battalion needs to identify and ensure maintenance access into all areas of the State Park and Campground facilities. A focus will be assessing the condition and maintaining access and clearance of the Big River Haul Road, which borders Big River from the coast within the Russian River State Park and continues inland into Jackson Demonstration State Forest.

A future project may be revisiting the removal or reduction of the Gorse (*ulex europaeus*) overgrowth in the Caspar area along Highway 1. This was a previously identified 3-year project for the eradication of this extremely invasive shrub that poses a significant access hazard and a serious fire danger due to its density and fuel loading. It is also a threat to the biodiversity of wildland areas. Removal is a difficult challenge due to Gorse’s sharp thorns which can easily pierce a firefighter’s gloves.

## **FIRE SAFE COUNCIL COMMUNITY MEETINGS IN BATTALION 6**

Fire Safe Council outreach meetings in the communities of Mendocino and Westport identified public concerns relating to hazards and assets at risk within coastal communities and established priorities for addressing community needs. Listed here are the communities’ top priorities; further details are included later in this report. Additional meetings and planning, which may include preparing applications for grant funding, will be necessary to implement action plans addressing these needs.



### **Ideas and Needs Identified at Westport Meeting**

- Establish a tax-supported Fire District to ensure adequate funding and support for equipment and operations.
- Increase firefighter training and education.
- Improve community coordination and cooperation for local response and reducing fire risks; improve education in fire prevention.
- Gain cooperative compliance with Public Resources Code section 4291 fire safe standards.
- Determine how to eliminate logging slash accumulations.
- Reduce and maintain reduction of large tracts of grass and other vegetative fuels bordering structures and roads.
- Ensure adequate supplies and access to private and community water storage reserves.
- Provide for upgrades to the community water plant and Wages Creek, the community water supply.

These issues are the community's top priorities and do not include all the points discussed at the meeting.

### **Needs Identified at Mendocino/Fort Bragg Area Meeting**

These communities perceive a lack of responsiveness from state government agencies, especially CalTrans and State Parks, regarding dead trees and excessive fuel buildup along roadways and the borders between residential properties and state lands. Other needs and ideas are these:

- Improved information and communication between the communities and federal, state, and local governmental agencies
- Better fire/rescue access to State Parks property
- Fuel breaks and reduction of dead trees and brush on JDSF residential boundaries and public access roadways.
- Better access to service forestry
- Compliance with the requirements of Public Resources Code 4291, plus proper road and driveway clearance
- Uniform and consistent application of road and residential addressing
- Water resources for fire protection need to be identified, accessible, and compatible with fire department apparatus.

CDF-Fire's Battalion 6 is committed to working cooperatively with the Mendocino County Fire Safe Council, communities, and local government fire jurisdictions to assist in addressing these concerns, by technical assistance or facilitation through administrative

services. Battalion personnel will endeavor to make positive contributions to mitigate the identified issues.

### **Further Details about Battalion 6 Meeting Locations and Attendees**

#### **Westport**

This tiny, beautiful coastal community north of Fort Bragg was purposely selected by the MCFSC as a location for a Fire Plan meeting due to its residents' efforts during the past year to re-establish a trained emergency response presence on the north coast. Coached and encouraged by CDF Battalion Chief Jim Davis, the Westport Volunteer Fire Department has been reorganized and revitalized by 18 firefighters who have devoted a huge amount of time to fire and medical training, as well as refurbishing and enlarging the fire station facilities. In June 2005 Chief Davis handed the baton to Beck Regalia, Chief, and David Doriot, Assistant Chief, following a Fire Department election.

The ten persons who attended the community meeting were mostly fire personnel, plus County Supervisor Kendall Smith, whose presence was greatly appreciated. As was noted above, creation of a Fire District with taxing authority was attendees' strongest desire. The Westport Fire Department has long existed under the jurisdiction of the Westport Water District, the only governing entity in the area, the boundaries of which include only the homes in Westport village proper. Firefighters at the meeting reported that fire suppression response extends far beyond this, yet the fire department has no authority to tax residents for providing such coverage. A few weeks after the community meeting, the Fire Department held a community barbeque featuring Chief Davis' delicious chicken. A significant sum was raised but the needs are still great.

In addition to those noted above, concerns were also raised about the village's dozens of abandoned houses surrounded by overgrown vegetation, and the Westport Beach "RV and Campground," on the beach north of town. Campers in this area number in the hundreds but have no education about wildfire hazard or where to go if a wildfire should threaten the area.

#### **Mendocino**

Realtors, foresters, insurance agents, fire chiefs, and several female firefighters were among the 20 persons who gathered on April 28 at the Mendocino Fire Department, hosted by Fire Marshal Jeff Wall. Attendees represented Comptche, Mendocino, Fort Bragg, Little River, and surrounding WUI neighborhoods.

Another primary concern is protection of electric power supply to coastal communities. Based on experiences of extended power outages due to winter storms, several residents stressed the need to protect PG&E lines from wildfires as well. One main trunk line extends from inland to Fort Bragg, and one trunk line extends down the coast from Fort Bragg to Elk.

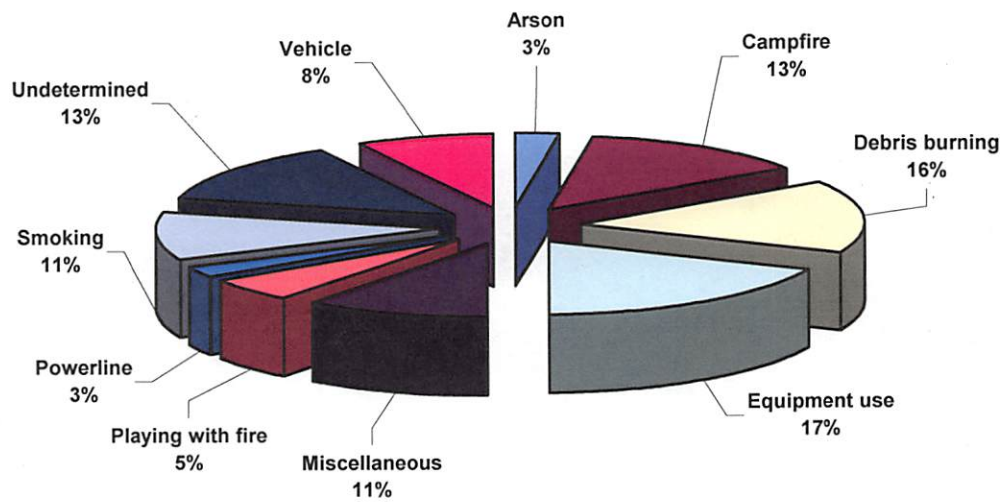
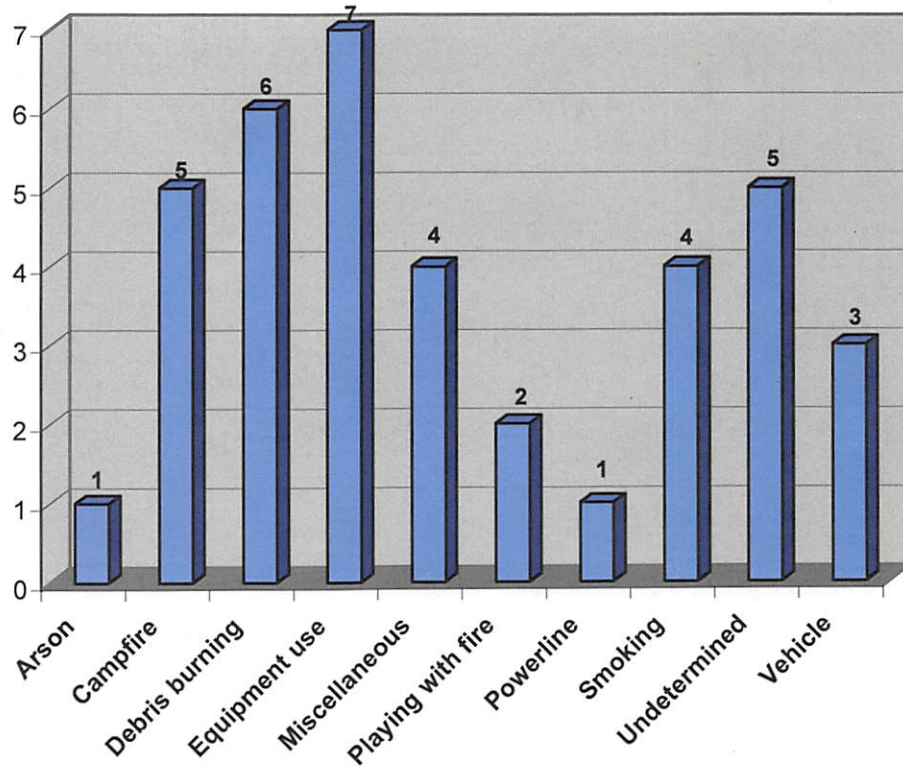
Due to line capacity limitations, no backup is currently available. Wildfire damage to a major transmission line could leave thousands of coastal residents -- and emergency response personnel -- without power for days or even weeks.

Ron Ensign of Surfwood Estates, near Mendocino, long a proponent of fire safe vegetation management, expressed strong concern about dead and dying trees and other fuels on State Parks and CalTrans lands adjacent to homes. In July 2005, MCFSC staff was able to relay his concerns directly to leaders of the California Fire Alliance at its first-ever public meeting, held precisely for the purpose of hearing the concerns of local Fire Safe groups. At that meeting, MCFSC suggested that State Parks and CalTrans officials, as key land managers in the State, be included in the Fire Alliance, in addition to the federal agencies which currently comprise its majority. CDF Director Dale Geldert, who chaired the meeting, responded by saying he would like the Fire Alliance to establish a task force of federal and state land managers who would respond to local residents' concerns about government-owned lands.



## Battalion 6 Fire Cause 2004

Total Fires: 38



## **CHAPTER 4**

# **COMPLETING THE PICTURE: CONCLUSIONS AND ACTIONS FOR COMMUNITY WILDFIRE PROTECTION**

## DEFINING WILDLAND-URBAN INTERFACE BOUNDARIES IN MENDOCINO COUNTY

**“Our whole county is a WUI!”** So responded county residents when meeting facilitators described the term “Wildland-Urban Interface” and asked attendees to name their communities. Indeed, they were very close to the truth, and with this in mind, we will attempt to define the WUI situation in our county’s various areas.

The Healthy Forests Restoration Act of 2003 provides that, in a Community Wildfire Protection Plan, communities themselves may define the sizes and boundaries of their Wildland-Urban Interface areas. This means that, based on their local topography, weather, wildland fuels, and other factors, they may determine an appropriate distance away from their population centers within which vegetation reduction projects should be undertaken to protect their communities.

Defining such boundaries in Mendocino County is a difficult task, for this reason. *The majority of Mendocino County’s residents live not in the Interface per se but rather in the Wildland-Urban Intermix, in homes and small communities scattered throughout thick wildland fuels, with no clearly distinguishable boundaries.* This situation resulted in part from a lack of decisive planning relative to wildfire danger, as was noted in the CDF Executive Summary at the beginning of Chapter 3. It resulted also from the strong desire of many Mendocino County residents to live in privacy, surrounded by the untouched beauty of pines, tanoaks, manzanitas, scotch broom, and other vegetation that happens to be highly flammable.

How then can WUI boundaries be determined? Due to the desire to create this Plan within a relatively short time frame, and the large number of WUIs identified (see Appendix B for the complete list), a case-by-case analysis of each community’s boundaries was not possible. Such analyses, including consideration of natural and man-made barriers that might become parts of fuel breaks, will be accomplished in the future and reported in this Plan’s revisions.

At this time, however, the county’s communities may be preliminarily divided into the two types of WUIs: Interface and Intermix.

**Interface Communities.** These larger population centers, which are cities containing just under one-third of the county’s residents, have discernable urban-interface boundaries:

- Willits, in Planning Zone 1
- Ukiah, in Planning Zone 2
- Fort Bragg, in Planning Zone 4



***We wish to identify the WUI boundaries of these communities as extending five (5) miles beyond the borders of their city limits.***

**Intermix Communities.** These smaller population centers, most of which are located along a portion of one of the county's major roads, have little or no distinct interface boundary, and most are immediately surrounded by wildland fuels:

- Leggett and Piercy, small towns located in thick forests along the Eel River
- Branscomb, to the west of Laytonville, a lumber mill town in thick forest
- Brooktrails, with 4,000 persons living mostly on heavily wooded hillsides
- The coastal towns of Gualala, Point Arena, Manchester, Irish Beach, Elk, Albion, Little River, Caspar, Cleone, Westport, and Rockport, located on the coast and intermixed with abundant trees and other vegetation
- Redwood Valley, Calpella, Hopland, Laytonville, Covelo, Yorkville, Boonville, Philo, and Navarro, small population centers in the flatlands, surrounded immediately by light flashy fuels such as oak woodlands with tall grasses
- Potter Valley in the eastern-most valley of the county, primarily an agricultural town surrounded by cultivated fields intermixed with trees and native brush.

The list of Wildland-Urban Interface/Intermix Communities identified by persons at the community meetings, reproduced in Appendix B, includes hundreds more WUIs. These are mostly Intermix areas, and their populations range from hundreds to only a few homes. Of course, communities with only a handful of homes may not qualify as official federal "Communities at Risk." However, they do have distinct names or characters, and their residents identify their home locations by these names. They are most definitely at risk, as they are exposed to dense fuels, steep slopes, and the potential for severe fire weather. The exact natures of small Intermix communities will be addressed in the future as mapping of these communities is performed.

***We wish to designate a WUI boundary of five (5) miles around the Intermix communities listed above and all communities identified in the List of WUI Communities appended to this CWPP.***

## **ASSETS AT RISK IDENTIFIED BY COUNTY RESIDENTS**

At this Plan's outreach meetings, the second type of information gathered was residents' perception of Assets at Risk in their WUIs. Attendees completed 3-page forms identifying 24 categories of assets, roughly paralleling those in the California Fire Plan and duplicated in Chapter 3, Part 1; this section supplements the Assets at Risk data mapped and listed there. MCFSC personnel tallied the residents' responses and performed some analysis, as listed in the chart below. The chart's columns are these:

- Attendees = the number of persons who attended the meetings
- Forms = the number of attendees who at least partially completed the 3-page form. Very few attendees filled out the entire form, partly due to meeting time constraints.
- Homes at Risk Completed = the number of attendees who responded to the question about the level of risk to homes in their areas
- Homes at High Risk = the number and percentage of persons who responded who feel their communities' homes are at high risk of destruction by wildfire

Because protection of lives and homes is a top priority of Mendocino County's fire safe efforts, we include here data only about homes at risk. These figures are not conclusive or objective, as they are only thoughts captured at a single time. Further, as the meetings were not equally advertised due to limitations of time, attendance at the meetings cannot be construed as truly representative of all residents. This information, however, is still valuable.

	<u>Number of Attendees</u>	<u>Forms Completed</u>	<u>Homes at Risk Completed</u>	<u>Homes at High Risk # and %</u>
<u>Planning Zone 1</u>				
Willits	33	18	12	12 100%
Laytonville	25	14	11	9 82%
Leggett	14	6	4	2 50%
Covelo	<u>11</u>	<u>11</u>	<u>4</u>	<u>4</u> <u>100%</u>
<i>Totals/average</i>	83	49	31	27 87%
<u>Planning Zone 2</u>				
Ukiah	33	16	13	10 77%
Hopland	9	4	4	3 75%
Redwood Valley	<u>12</u>	<u>12</u>	<u>9</u>	<u>7</u> <u>78%</u>
<i>Totals/average</i>	54	32	26	20 77%
<u>Planning Zone 3</u>				
Boonville	22	14	7	3 43%
Point Arena	<u>20</u>	<u>15</u>	<u>14</u>	<u>12</u> <u>86%</u>
<i>Totals/average</i>	42	29	21	15 71%
<u>Planning Zone 4</u>				
Mendocino	20	10	7	6 86%
Westport	<u>10</u>	<u>6</u>	<u>4</u>	<u>3</u> <u>75%</u>
<i>Totals/average</i>	30	16	11	9 82%
County Totals:	209	126	89	71 80%

In summary, of meeting attendees who ranked homes at risk, 80% feel their own and their communities' homes are at high risk of destruction by wildfire.

Attendees also repeatedly emphasized concern about these assets and values:

#### **Assets (Infrastructure)**

- Electric power lines, most of which belong to PG&E
- Telephone and other communication lines
- Water supply, storage, and treatment facilities
- Cell phone towers
- Emergency radio repeater sites
- Solar power facilities (privately owned)
- Roads and bridges

#### **Values**

- Human lives
- Pets, horses, and livestock
- Wildlife
- Rivers and watersheds
- Recreational and scenic areas
- Timber
- Historic buildings, including these:
  - Laytonville: Bowman Homestead
  - Mendocino: Many buildings in Village of Mendocino
  - Comptche: Old Comptche School
  - Westport: Many buildings 100 years old, including Lost Coast Inn and Dubois House
  - Covelo: Eel River Forest Service Station
  - Leggett: Peg House
  - Point Arena and Gualala: Historic districts, Carriage House, St. Orres Hotel/restaurant, Old Milan Hotel outbuildings
  - Brooktrails: Brooktrails Lodge
  - Ukiah: Numerous buildings in town, plus Vichy Springs Resort to the west
  - Overall: Many barns at least a century old

A note about terminology. Both facilitators and meeting attendees, new to the world of wildfire planning, struggled with the term “assets at risk.” Some residents associated the word “assets” primarily with items of specific monetary worth. Facilitators therefore used both “assets” and “values” to explain the broad meaning of the information being sought. The division of the above lists into those categories reflects a general consensus gained from all twelve meetings.



## **STRUCTURE IGNITABILITY IN MENDOCINO COUNTY**

As more people move into Mendocino County's WUI areas, structure ignitability – a building's susceptibility to catching on fire -- becomes a more pressing issue. Very few homes in the county have been lost to wildfire in the past several decades, but this good fortune could change on any day of any fire season.

***Most structure losses due to wildfire can be prevented through attention to all three of these crucial practices:***

- Proper planning, which locates homes and communities such that their exposure to wildfire is minimized
- Use of building design techniques that prevent flames or windborne embers from entering the structure, and use of building materials that are fire and heat resistant
- Managing and reducing the flammable vegetation around the structure

The typical home in Mendocino County's Interface and Intermix areas is far from being well-planned and well-designed as pertains to wildfire, and its vegetation is far from being sufficiently managed. Unfortunately, a significant percentage of these homes --

- Are built on steep hillsides with no setback from the slope
- Are of all wood construction
- Have roofs which cannot sufficiently resist ignition by blowing embers
- Have wooden decks under which flammable materials accumulate
- Have eaves and soffits that are not enclosed, and vents that are not screened
- Have large paned windows and glass doors facing heavy wildland fuels
- Are surrounded by trees with dead branches over the roof
- Are surrounded by dense, flammable vegetation or light, flashy fuels

All of these factors, of course, make for a high level of ignitions. A lesson on reducing structure ignitability could consist precisely of *not* doing all these things! A Wildfire Risk Assessment adapted by the MCFSC for Mendocino County from a Firewise Communities checklist covers all the above mistakes and teaches homeowners how to avoid them, in keeping with the requirements of California Public Resources Code Sections 4290 and 4291.

## **The Destructive Power of Embers**

The vulnerability of untreated wood shake roofs was shown near Ukiah as this Plan was being compiled. Wind-driven flames of the 8-acre Watson Fire in Rogina Heights were racing uphill as firefighters scrambled to protect the numerous WUI homes above. In the thick smoke, the Incident Commander could not see what the Air Attack pilot reported from above: a home not directly impacted by flames, but with its wood shake roof on fire! The roof was soon extinguished, and the excellent work of local and CDF firefighters resulted in quick containment of this potentially devastating fire. But the lesson remains: *that home, with a shake roof, was the only structure damaged by the fire, and the ignition was caused by a flying ember.* Fire Safe and CDF personnel returning to the scene two months later were delighted to see the home sporting a new, less-combustible roof.

This example supports what wildfire researcher Jack Cohen has discovered, and why video footage of wildfires often shows the ruins of homes amidst nearly untouched trees: *flying embers are a major source of home ignitions, and structures must be built to resist them.* Further, it must be remembered that homes in the wildlands are also fuels – often more flammable than the vegetation surrounding them -- and burning embers from one home often ignite other homes. Thus a home that resists ignition helps nearby homes survive as well.

The Fire Safe Council would like to add here an observation regarding fire suppression techniques in the Wildland-Urban Interface. Often in a major wildfire the “bump and roll” method is used. This means that firefighters temporarily defend a home in the fire’s path by directing the fire around the home, then move to another home and do the same. Some firefighters using this method have visited the scene in the aftermath and been astonished that homes they defended, sometimes even at great risk to themselves, had nevertheless burned to the ground. The reason? Smoldering embers had hidden themselves in vulnerable places such as cracks in roofing material or inside unscreened vents. After firefighters left, the embers had burst into flames that eventually consumed the homes.

Such situations have resulted in hundreds of home losses, and add weight to the value of “sheltering in place.” In this scenario, able-bodied residents remain in their homes as the fire front passes, and then keep vigil to watch for, and extinguish, such smoldering embers, inside or out. Some wildfire educators in Mendocino County are beginning to educate residents on this option where evacuation may be impossible. They emphasize, however, that residents must be well informed and thoroughly prepared before choosing this course of action. We will return to this subject later.

## **Recommendations for Ignition Resistant Building Construction**

As was noted at the beginning of this section, reduction of vegetative fuels must go hand-in-hand with ignition-resistant building methods and materials if WUI homes are to be consistently saved.

We can learn lessons for Mendocino County from analyses of past fires elsewhere, such as the 1961 Bel Air Fire, which destroyed 505 homes. (Thanks to Ethan Foote of CDF for this material.) The report “Decision Analysis of Fire Protection Strategy for the Santa Monica Mountains” found that 71% of the buildings with 26-50 feet of brush clearance survived the fire. However, *the survival rate of buildings exposed to the fire increased to 95% if the houses had both brush clearance and ignition resistant building construction.*

A similar pattern was seen on the 1990 Santa Barbara Paint Fire, as reported in *California's I-Zone: Urban/Wildland Fire Prevention & Mitigation*. On that Fire, which destroyed 479 homes and major buildings, only 4% of the 438 houses surveyed survived when both non-flammable roofing and 30 feet of brush clearance were absent. Put plainly, this implied that 96% of homes with both flammable roofs and lots of brush were destroyed.

Specific recommendations for reducing the ignitability of structures have been available now for 40 years. One outcome of the Bel Air Fire was publication in 1965 of the *Fire Safety Guides for California Watersheds* by the County Supervisors Association of California. These recommendations have been updated through the years, the current version being the *Structural Fire Prevention Field Guide for Mitigation of Wildfires*. The recommendations for ignition resistant building construction address roofing, eaves and balconies, exterior walls, rafters, windows, doors, attic ventilation openings, and under floor areas.

Rather than attempt to duplicate all the current recommendations on structure ignitability here, we refer the reader to the *Structural Fire Prevention Field Guide*, available at <http://osfm.fire.ca.gov/structural.html>, and incorporate its recommendations by reference into this Community Wildfire Protection Plan.

In response to the persistent loss of life and property in wildfires, the most important of these recommendations is now a *requirement* for structures in Interface areas: all new buildings, plus any existing buildings undergoing significant re-roofing, are required by California Building Code's Section 1503 to have ignition resistant roofing.

### **Fire Safe Planning in Mendocino County**

The inclusion of fire safe concepts in land use planning and building construction was sorely lacking in Mendocino County in past decades. Unfortunately, the requirements of Public Resources Code Section 4290, over which CDF has jurisdiction for State Responsibility Areas, apply only to new construction after 1991. In addition, the current version of the California Fire Code has not been adopted either by the County as a whole or by most of the local jurisdictions, which means its provisions are not enforceable in most of the county. As is shown on the map of local fire districts at the end of Chapter 2, about 50% of the county's lands lie outside of any local jurisdiction which could adopt the Fire Code. In sum,



***Mendocino County is in great need of improved, comprehensive, fire safe planning in its many wildland areas, including adoption of a Fire Code commensurate with the county's wildfire risk.***

In late 2003 MCFSC's Coordinator toured the aftermath of the Southern California Fires to learn about wildfire behavior and structure ignitions. One community in particular stood out as a model of fire safe planning. The development is in a classic Interface situation, with numerous homes surrounded by a boundary of wildland fuels. But this community was built with careful attention to all three fire reduction practices. Tasteful concrete walls with overlapping openings serve as fire breaks but allow residents access to the wildlands. The exteriors of the attractive homes, including their roofs, are non-combustible and guard against intruding embers. The interiors of all homes have water sprinkler systems to extinguish fires begun inside. Irrigated lawns and fire resistant plants surround the homes. The result? Although a major wildfire raged along the mountains bordering the community, consuming vegetation very near the homes, not one building was damaged.

Ron Montague, a fire planning expert from San Diego County, proposes another way to reduce the loss of homes, and it is included here as food for thought. Typical housing in WUI situations occurs along both sides of a dead-end road which is frequently the "one way in, one way out" that is so prevalent in Mendocino County. In such situations every home's back yard is a small Interface. Firefighters attempting to protect such homes typically park their engine in front and pull hoses to the back. After the Southern California Fires, MCFSC staff observed that home after home along such roads and especially cul de sacs had been reduced to piles of twisted metal and ash. Why? Because every back yard was a conduit bringing fire to the home, and there were not enough fire engines to go around. Ron Montague suggests a new model: building homes along the *inside* of a road that forms a loop around the homes. Such a road serves as a fire break and reduces evacuation congestion; and the back yards, which border each other, are mutually protective. In addition to greatly reducing the risk to homes, such a design would also reduce the risks to firefighters.

The ultimate goal for new structures in Mendocino County's WUIs should be not "defensibility" but "survivability." These are buildings that can survive a wildfire on their own, with no fire suppression efforts at all, such as those in the community described above. This concept, long promoted by Firewise Communities, is a model which Mendocino County's WUI residents would do well to emulate.

## **WILDFIRE MITIGATION PROJECTS AND PRIORITIES**

Numerous wildfire mitigation projects in Mendocino County have been identified by the Fire Safe Council, CDF, the Bureau of Land Management (BLM), and the U.S. Forest Service. They include, but are not limited to, vegetative fuels reduction projects. In this section, Part One contains *all* projects identified to date. Fuels reduction projects are listed in Part Two.

### **PART ONE: ALL CURRENT AND PROPOSED PROJECTS**

#### **MENDOCINO COUNTY FIRE SAFE COUNCIL PROJECTS**

##### **Grant Funding Already Received by MCFSC:**

**Allen-Heath Memorial Foundation County Fire Planning Grant:** \$14,000 was granted to fund the MCFSC's portion of this Plan's work, as described in Chapter 1. The Foundation granted the Council an additional \$20,000 in late 2005 to continue this and other planning and educational work in 2006. That grant will partially fund the Council's operational costs.

**MCFSC Start-Up Grant:** \$53,324 was awarded by BLM via the California Fire Safe Council Grants Clearinghouse, to support the Council's first year of operation with a full-time Executive Director, namely 2005. The Council had operated for the previous year on \$2,000 of donations and a volunteer Coordinator who is now employed by the Council.

**Little Mill Creek Sheltered Fuel Break Grant:** \$35,000 of BLM funding was received in early 2005 for creation of a fuel break along a strategic ridgetop road at the northwest end of Anderson Valley. The project involves both mechanical and hand treatment, with vegetation either chipped or burned, and is described in detail in Chapter 3's CDF Battalion 5 report.

##### **Grant Funding to be Received by MCFSC in 2006:**

**Brooktrails Township Fire Program:** \$73,054 of BLM funding was awarded to assist this extreme-risk area in 2006. Of these funds, part is earmarked for fire planning, including mapping and evacuation brochures. The remaining portion, with a large in-kind match by residents, will be used for roadside vegetation removal, plus improved road signage in the outlying areas of Sylvandale and Spring Creek. Fuels treatment will be done by mechanical and hand methods, possibly utilizing a masticator mounted on an adjustable boom.

**Hopland Band of Pomo Indians Defensible Space Clearing and Fuel Break:** \$22,250 of BLM funding was awarded for hand clearing around 60 homes on the Hopland Indian Reservation, which borders a University of California Field Station, and for a bladed fuel break around the area. A match valued at \$24,000 will be contributed by CDF in the form of LE-38 home inspections before and after the project work.

**Mendocino County Title III Funds:** \$20,000 of funding through Title III of HR 2389, the Secure Rural Schools and Community Self-Determination Act, was allocated by the Mendocino County Board of Supervisors in September 2005 for fire prevention education and planning. At present the MCFSC is awaiting the end, on December 19, of a 45-day public comment period required for Title III projects.

**Projects Submitted by MCFSC but not yet funded:**

The Fire Safe Council has submitted six additional “concept papers” through the Grants Clearinghouse for projects not yet funded. Most will be resubmitted in early 2006.

**Mendocino County Fire Safe Mailer or Booklet.** This project will create a full-color publication covering all aspects of rural fire safety, using pre-existing free-of-charge graphics and text, but with photos and facts tailored to Mendocino County.

**50 Model Defensible Space Homes.** This county is home to thousands of elderly and disabled persons who lack the resources to remove flammable vegetation around their homes. This project will provide hand clearing around 50 low-income homes, utilize the projects as opportunities to do educational outreach, and ensure maintenance of the clearing.

**Pine Mountain Education/Signage/Fuel Reduction.** The Pine Mountain Fire Safe Council created this very economical project, which includes a large community fire safe sign, quarterly fire safe mailers to its 304 homes, improved road signage, and chipping services, with a significant in-kind match of hand clearing to be performed by residents.

**Rancho Navarro Fire Plan Development.** This project, developed by the Rancho Navarro Safety Committee, includes an education campaign, chipping services, hand and/or mechanical fuels reduction along evacuation routes, and creation of a Fire Safety Plan.

**McNab Ranch Address Signage and Mapping.** This WUI is recognized throughout the county by fire professionals as at extreme risk of wildfire, and has already experienced several “close calls.” The project will unify address signage and develop laminated maps. A Knox Box at the ranch’s entrance will hold the maps for easy accessibility by firefighters.

### **Additional Projects for which MCFSC will (or may) seek funding:**

**Eucalyptus Tree Removal at Peachland Road.** This project, identified as necessary by attendees at the Boonville community meeting, will remove an 800-foot-long swath of towering eucalyptus trees located along State Highway 128 across from Peachland Road, north of Boonville. These trees, now mostly “suckers,” carried the Peachland Fire across the highway in 1996, resulting in the destruction of two homes. The work will be done by fallers and hand crews with chain saws; permission and commitments have already been obtained.

**Simpson Lane Fire Safety and Evacuation Planning.** This WUI area southeast of Fort Bragg hosts hundreds of homes relying on one evacuation route. A potential alternate route is Pearl Drive, which if linked to Simpson Lane would create a loop. Exploration of this or other evacuation possibilities may require significant funding but could save many lives.

**Community Building for Wildfire Safety.** Due to Mendocino County’s immense size, geographical barriers, and varied topography and fuels, Fire Safe education, planning, and vegetation management efforts must be largely based in local communities. *But many WUI residents do not know their neighbors.* The MCFSC wishes to use educational events to help foster community spirit and a desire to work together to meet the common risk of wildfire. MCFSC has already begun this work but lacks funding to do so on the scale that is needed.

**County-Wide Address and Road Signage Project.** Finding homes in many rural areas is difficult in the daytime and nearly impossible at night. This project would encourage and fund durable signage with reflectorized letters and numbers at least 3” tall, easily visible from both directions, with arrows indicating clearly the location of each home.

**County-Wide Mapping of WUI Communities and Creation of Evacuation Brochures.** Updated mapping of WUI Communities not separately named in this section is a critical need. The MCFSC would like to provide local groups with both GIS mapping assistance and funding to print educational evacuation brochures they themselves create using their local knowledge. Maps would identify private water supplies, homes of persons needing assistance, and all other available information necessary to firefighters in an emergency.

**County-Wide Chipper Program.** As an incentive for persons able to do their own vegetation management, the MCFSC wishes to offer free or reduced-cost roadside chipping. Most rural residents utilize burn piles, resulting in reduced air quality and numerous escaped “control burns.” A local licensed, insured company would be hired for this work.

**Fire Safe Educational Billboards along Highways.** Equipment use and cigarettes tossed from cars cause numerous wildfires each year in the county. In addition to the smaller signs posted by CDF, the MCFSC would like to obtain billboard space along Highway 101 during fire season to educate residents and passers-through about the county’s high fire danger.



**Educational Materials for Visitors.** Following upon excellent suggestions by the fire chiefs in Leggett and Piercy, which experience high levels of tourist traffic, the MCFSC hopes to create one or more attractive pamphlets, cards, or otherwise formatted materials to educate tourists about the realities of wildfire in Mendocino County.

**Educational Outreach to Children.** Because children can be exceptional carriers of messages to their parents, the MCFSC would like to assist as needed to supplement fire prevention efforts in schools. This project would provide educational materials for various ages and reading levels, and additional materials for the parents.

**Educational Packets for Realtors, Insurance Agents, and Planning Departments.** These offices are prime locations for reaching new homeowners and those planning to build or remodel in WUI locations. This project would purchase and place packets of pertinent information in each of these offices for distribution to clients.

**Education, Planning, and Fuels Reduction in Planning Zone 2 (CDF Battalion 3).** The County's largest concentration of WUI residents at risk – perhaps 10,000 or more -- is in the hills surrounding Ukiah Valley and Redwood Valley. A major educational effort, with evacuation and hazard mitigation planning, is needed in all these areas:

- Ukiah Valley's eastern hills: Lake Mendocino Drive, Redemeyer Road, Deerwood, El Dorado Estates, and Rogina Heights
- Ukiah Valley's western hills: Mendocino College, Orr Springs Road, the "West Hills" area within Ukiah's city limits, Oak Knoll/Fircrest, Robinson Creek Road, and Highway 253
- Greenfield Ranch, north of Orr Springs Road (includes creation of safety zones)
- Redwood Valley's northern hills: Upper Tomki Road and Cave Creek subdivision (includes creation of safety zones)
- Other Redwood Valley WUIs: Lower Tomki Road and roads branching east from East Road, including Black Bart Trail, south to Highway 20

**Additional Local Vegetation Management Projects.** These are future projects as will be identified during the fire planning process begun by creation of this CWPP. Some are named in the list of CDF projects later in this section.

**Additional Defensible Space Home Clearing and Maintenance.** The MCFSC has applied for funding to perform hand clearing around 50 homes of low-income elderly or disabled persons, but would eventually like to provide this service for many more and to create ways to ensure that clearance will be maintained in future years.

**Continuation of Brooktrails Township Fire Program.** Funding for fire planning and vegetation reduction has been awarded for 2006. This project, including hand and mechanical fuels reduction, would provide for continuation of those efforts in the future.

The Southern Humboldt (County) Fire Safe Council has brought to our attention two additional proposed projects, in which the MCFSC would like to be a partner.

**Bell Springs Road Shaded Fuel Break/Safety Corridor.** Bell Springs Road is the main access for over 140 square miles of northern Mendocino, southern Humboldt, and southwestern Trinity counties. Of its 27 miles, 18 are in Mendocino County; and the area sees many wildfire ignitions. The Southern Humboldt Fire Safe Council's proposed project would potentially utilize both mechanical and hand treatments. CDF's Battalion 4 has also named the Mendocino County portion of this road as needing clearance.

**Whale Gulch Fire Department Vegetation Management.** This Fire Department is located in Mendocino County but dispatched by Humboldt County to the north because of road access issues. The MCFSC does not have details of this work at this time but wishes to support it if possible.

One further idea, supported by some of Mendocino County's most experienced fire planners and perhaps more important than any of the projects listed above, is this: **Creation of a Mendocino County Chaparral Land Management Cooperative**, a public/private partnership of land managers along the county's eastern chaparral-covered mountains and hills. The purpose of this effort, potentially involving the U.S. Forest Service, BLM, and numerous interested landowners, would be to plan and perform mosaic prescribed burns of these fuels all the way from Covelo to Hopland. The project would require hiring a full-time fire planner to promote the burning and guide the work through the maze of related regulations. The work would be huge, but so too is the quantity of dead and dried fuels awaiting a north wind in October to push their flames into the populated valleys of Mendocino County.

## **CDF'S CURRENT AND PROPOSED FUELS TREATMENT PROJECTS**

The following is a summary; details are included in Chapter 3's CDF Battalion Reports.

### **Battalion 1 (Covelo)**

- The Little Valley Fuel Break, located on the ridge west of the Round Valley Indian Housing Tract, was constructed by CDF and continues to be maintained by CDF.
- The Pink Fuel Break, proposed in the Fire Defense Plan prepared by CDF, will minimize risk on both the west side of Round Valley and the east side of Poonkinney Ridge.
- Chicken Ridge and Pigeon Ridge in Round Valley contain 75-100 structures surrounded by large vegetative fuel loads, and have the potential to suffer from a large, damaging fire.

### **Battalion 2 (Willits)**

- The Brooktrails Township Fire Plan, funded via the MCFSC for implementation in 2006, includes hand and mechanical fuels treatment along evacuation routes.
- Brooktrails Township also needs continued development of an effective “Greenbelt Management Plan.”
- The Pine Mountain Fire Safe Council’s Education/Signage/Fuel Reduction grant application includes road clearing by hand treatment.

### **Battalion 3 (Ukiah)**

Three BLM current and proposed projects, described in the BLM section below, are located in this battalion and involve CDF resources:

- Pyramid Ridge Vegetation Management Program (VMP)
- Red Mountain VMP
- North Cow Mountain VMP

A fourth project is Maintenance of the Ukiah West Side Fuel Break. Although this entire project was not completed, as was described in Chapter 3, the portions that were done need to be maintained.

### **Battalion 4 (Laytonville)**

- The Sinkyone VMP is a joint CDF/Department of Parks and Recreation project for the Sinkyone Wilderness State Park, seeking to return fire to a marine terrace ecosystem.
- The Cahto Tribe has obtained grant funding to conduct a tree-thinning project around tribal residences, but additional funding is needed to complete the project.
- Fuel reduction and shaded fuel breaks are needed along these evacuation routes: Spy Rock Road (including Registered Guest, Iron Peak, and Blue Rock), Ten Mile Creek, Bear Pen Subdivision, Ebert Lane, Pepperwood Springs Subdivision, Cherry Creek Subdivision, Mulligan Lane, and Bell Springs Road (see MCFSC list re: Bell Springs).

### **Battalion 5 (Boonville)**

- The Little Mill Creek Sheltered Fuel Break, described in the Battalion 5 report, is a major ongoing fuels treatment project involving both hand and mechanical treatment.

### **Battalion 6 (Fort Bragg)**

- Removal of Gorse overgrowth in the Casper area along Highway 1 is needed to remove this invasive shrub that poses a significant fire and access hazard.

## **BUREAU OF LAND MANAGEMENT PROPOSED PROJECTS**

The Bureau of Land Management, Ukiah Field Office, intends to perform three vegetation management projects in Mendocino County in the near future. All are located within CDF Battalion 3, and further details may be found in Chapter 3.

- **Pyramid Ridge VMP (2005).** BLM will do hazard reduction burning in cooperation with CDF, in an area with a perimeter is 22,300 acres, of which approximately 40% is in Mendocino County; the rest is in Lake County.
- **Red Mountain VMP (2007).** This project will conduct prescribed fire treatments for a 3-year research study on the efficacy of prescribed burning and mechanical methods in reducing the fire hazard in chaparral.
- **North Cow Mountain VMP (2009).** The project will develop a burn plan for the northern area of Cow Mountain, under CDF's Vegetation Management Program. The burn plan would be implemented in subsequent years. Fuel breaks in the fire-prone upper Mill Creek Road area may be part of this project.



## **U. S. FOREST SERVICE PROPOSED PROJECTS FOR THE MENDOCINO NATIONAL FOREST**

- **Etsel Ridge Fuel Break:** Understory brush clearance on Etsel Ridge/Mexico Ridge
- **Anthony Peak Ridge:** Understory brush clearance on Anthony Peak to Road M1
- **Howard Lake SPLAT:** Understory brush clearance in the Howard Lake area
- **Roadside Clearance:** Roadside brush clearance along M1 road/Etsel Ridge/Mexico Ridge Road, Indian Dick (M1), and side roads

These six additional projects have been identified by the Forest Service:

- **Tar Flat Burn.** Understory burn for hazard fuels reduction in 212 acres, to be accomplished in Fall of 2005.
- **Newhouse Ridge Burn.** Understory burn for hazard fuels reduction / deer habitat improvement in 272 acres, to be accomplished in Fall of 2005.
- **Covelo TSI.** Plantation pre-commercial thinning on 20 acres in Mendocino Pass Township. Still in planning phase.
- **Grizzly Late Successional Reserve.** Still in planning as of Summer 2005.
- **Steep Slope.** Brush burning on 120 acres, to be accomplished in Spring 2006.
- **Horse Pasture Ridge.** Brush burning on 400 acres in Spring 2006-2007.

## PART TWO: FUEL REDUCTION PROJECTS

The following is a concise list of all high priority fuel reduction projects developed by the Mendocino County Fire Safe Council, CDF Mendocino Unit, the Bureau of Land Management, and the U.S. Forest Service. Further work on prioritizing the projects is still needed. These projects are listed by Planning Zone and CDF Battalion.

PROJECT NAME	AGENCY	ZONE / BATN	
50 Model Defensible Space Homes	MCFSC	All	All
Additional Home Clearing and Maintenance	MCFSC	All	All
Countywide Chipper Program	MCFSC	All	All
Additional Local Vegetation Management Projects	MCFSC	All	All
Etsel Ridge Fuel Break	USFS	1	1
Anthony Peak Ridge	USFS	1	1
Howard Lake SPLAT	USFS	1	1
Roadside Clearance	USFS	1	1
Tar Flat Burn	USFS	1	1
Newhouse Ridge Burn	USFS	1	1
Covelo Timber Stand Improvement	USFS	1	1
Grizzly Late Successional Reserve	USFS	1	1
Steep Slopes	USFS	1	1
Horse Pasture Ridge	USFS	1	1
Little Valley Fuel Break	CDF	1	1
Pink Fuel Break	CDF	1	1
Chicken Ridge/Pigeon Ridge Vegetation Management	CDF	1	1
Brooktrails Township Fire Program	MCFSC	1	2
Continuation of Brooktrails Township Fire Program	MCFSC	1	2
Brooktrails Township "Greenbelt Management Plan"	CDF/BTCSD	1	2
Pine Mountain Education/Signage/Fuel Reduction	MCFSC	1	2
Sinkyone VMP	CDF/Parks & Rec	1	4
Cahto Tribe tree thinning	Cahto Tribe	1	4
Spy Rock Road Roadside Clearing	CDF	1	4
Ten Mile Creek Roadside Clearing	CDF	1	4
Bear Pen Subdivision Roadside Clearing	CDF	1	4
Ebert Lane Roadside Clearing	CDF	1	4
Pepperwood Springs Subdivision Roadside Clearing	CDF	1	4
Cherry Creek Subdivision Roadside Clearing	CDF	1	4
Mulligan Lane Roadside Clearing	CDF	1	4
Bell Springs Road Roadside Clearing	CDF/MCFSC	1	4

Whale Gulch Fire Dept Vegetation Management	MCFSC	1	4
Chaparral Land Management Cooperative	Many	1-4	1-2
Pyramid Ridge VMP	BLM w/CDF	2	3
Red Mountain VMP	BLM w/CDF	2	3
North Cow Mountain VMP	BLM w/CDF	2	3
Maintenance of Ukiah West Side VMP	CDF	2	3
Education, Planning, and Fuels Reduction in Zone 2	MCFSC	2	3
(see above list of WUIs in Ukiah and Redwood Valleys)			
Hopland Band of Pomo Indians Clearing & Fuel Break	MCFSC	2	3
Rancho Navarro Fire Plan Development & Clearing	MCFSC	3	5
Eucalyptus Tree Removal at Peachland Road	MCFSC	3	5
Removal of Gorse overgrowth in Caspar area	CDF	4	6

## **ROADBLOCKS TO SAFETY**

The road to wildfire safety is not an easy one. Much work must be done, and many minds changed, before Mendocino County will be safe from the threat of devastating wildfires.

Firefighters and fire-conscious residents throughout Mendocino County repeatedly raise several key concerns. *An understanding of these issues is essential to understanding the overall wildfire risk and the difficulties in addressing it.* As some of these were not captured thoroughly during public meetings or in previous sections, they are described here.

### **(1) INCONSISTENT, ILLEGIBLE, OR NONEXISTENT ROAD AND ADDRESS SIGNAGE**

As was mentioned earlier, poor road and address number signage is the greatest overall hindrance to emergency response in Mendocino County. All too often ambulances and fire engines waste precious minutes exploring multiple driveways and even roads, attempting to find persons in dire need of medical assistance or fire suppression.

Many rural roads have multiple names and some have no names at all. The names on official records or maps, including those at the county's Emergency Command Center, may not be those colloquially used by the roads' residents. A fire in Sylvandale, for example, may be reported as located at 10000 Troll Ridge, whereas dispatch maps call the road "Timberline." To add to the confusion, the road immediately preceding it is called "Timber." In the Pine Mountain area east of Willits, road signage is almost nonexistent, partly because certain roads or branches thereof are simply unnamed! Many rural residents receive their mail at Post Office boxes and do not "need" a street address. One of this Plan's authors listened recently to a dispatcher and ambulance driver trying to locate the unmarked home, on an unmarked road, of a person who had stopped breathing. She understood the responders' frustration, having been lost in that location herself. Fortunately, Fire Safe Councils have been established in both areas, and are working to correct these problems.

Where road names are known and signs are posted, signs are often faded, incomplete, and difficult to read, and may not point to the correct road. Signage meeting the requirements of California Public Resources Code section 4290 – reflective, visible from both directions, with numbers and letters at least 3 inches tall and contrasting in color from the background -- is rare in rural areas. Again, local fire safe personnel are beginning to address this problem. But much work remains to be done.

Often residents raise the objection that signage is not needed because "if there's a fire you'll see the smoke." Firefighters respond that this may be true, but given the thousands of ridges



and valleys in this county, and the prevalence of dead-end roads, seeing the smoke doesn't equal getting to the fire. And seeing smoke at night is not a certainty. Even more powerful is this response from Emergency Medical Technicians: "Eighty percent of our calls are for medical emergencies. At two o'clock in the morning when your spouse is having a heart attack, I can't see your home from three miles away!"

In rural settings where farmers or ranchers have been on their land for decades, humorous situations can arise when older folks assume that everyone knows the history they do. A little story will illustrate. One CDF emergency dispatcher reports receiving a request for assistance from an older gentleman who described the location as "the place where Roscoe Brown's dog got hit back in '79." The hapless dispatcher responded, "I'm sorry, sir, but I wasn't born yet then, so I don't remember the incident!"

## **(2) RESISTANCE TO FIRE SAFE EFFORTS**

A portion of both full-time and part-time WUI residents actually resist fire safe efforts, including 1) vegetation removal, 2) installation of road and address signage, and 3) opening of evacuation routes. *For some residents, dense vegetation, thick trees, nearly-impassable driveways, locked gates, and a complete lack of signage are the very reasons for which they moved to Mendocino County!* Locked gates across formerly-open access and evacuation routes are common. Many a populous WUI area now has no second evacuation route because a stubborn landowner – who may or may not have the right to do so -- refuses to allow anyone on his/her road even to save lives!

The primary reasons for resistance are these:

- The desire to maintain the beauty of their surroundings "naturally," thus a resistance to creating even minimal defensible space or removing completely dead brush.
- A strong affinity for trees and a corresponding resistance to any removal, trimming, or thinning of trees, sometimes even those that are diseased, dead, or in crowded locations where they could never thrive.
- An intense desire for privacy, either for personal reasons or to hide illegal activities, such as marijuana cultivation or, less frequently, the manufacture of methamphetamine. Many persons wishing to remain unfound and unseen, for whatever reason, are quite active in protecting their anonymity. Road signs installed by emergency-conscious residents at their own expense have frequently been destroyed or stolen.

Fortunately, minds are beginning to open, one by one, to the reality that this resistance puts residents and their neighbors in danger. Small interactive meetings are a good venue for

providing “reality check” education. Aware of the sensitivity regarding illegal activities, fire personnel sometimes attend these meetings in jeans and t-shirts, to avoid the appearance of law enforcement. It is highly rewarding to those leading the meetings to see former resisters “converting” to the wildfire message. Special thanks are due to the fire-conscious residents who have opened their homes to their neighbors for these meetings.

### **(3) NON-RESIDENTS OR NEW RESIDENTS**

Out-of-county persons visiting, passing through, or newly-arrived as residents pose special problems. Such persons are generally oblivious of wildfire danger, resulting in the following. To be fair, we acknowledge that careless residents are also guilty of these follies!

- Burning cigarette butts tossed from vehicles cause a number of wildfires each year, especially along Highway 101 and Highway 20 but also on the lesser-used roads.
- Users of campgrounds, parks, and beaches are careless with campfires and other sources of ignition. These situations are often associated with “partying,” during which times people are more reckless than usual.
- Most absentee landowners of rural parcels – and they are numerous -- make no effort to clear their property, even when cited for failure to do so, posing a threat to adjoining properties where full-time, fire-conscious residents live. This is an extremely pervasive problem in Mendocino County.
- Many new residents of the county, either full-time or in numerous weekend homes, are from urban or suburban areas. These persons, used to fire departments just down the street, are woefully ignorant of the potential for wildfire and the long response times required to reach fires in remote locations. Such persons even berate emergency personnel for not arriving within several minutes – although they may not even live within a district or pay a penny for such services.

Education is the main key to solving all of these problems. The Mendocino County Fire Safe Council, local Fire Safe Councils, CDF, and local fire departments are committed to work together to educate the residents, landowners, and visitors of Mendocino County as to the wildfire threat we face and what we can do to make ourselves Fire Safe.

## A VISION FOR THE FUTURE: FIRE SAFE HOMES AND COMMUNITIES

In the two years since the MCFSC was founded, the MCFSC's vision has grown much broader than its founders could have dreamed. It now includes the desire to explore using biomass and small diameter trees, to work cooperatively with local businesses to help create jobs, to develop private water supplies with fire hose fittings, to join in multi-county projects, to partner with organizations doing related work, to have CDF Volunteers in Prevention trained to perform home inspections, to foster acceptance of needed control burns, and to perform other projects as described in the MCFSC's grants proposals.

In addition, the MCFSC, together with CDF and local fire personnel, is now urging WUI residents to think ahead realistically and seriously about a worst-case scenario such as the Southern California Fire Siege of 2003 – one where firefighters are not familiar with the area, the Incident Command System is overwhelmed, and, in general, chaos reigns. A possible scenario follows:

*“Suppose, for example, that our CDF air tankers and helicopter, engines, dozers, and even local fire department resources are fighting a major fire in Southern California -- when a significant wildfire breaks out in Mendocino County. Fire personnel and apparatus completely unfamiliar with the county arrive to help. In the confusion, local fire department maps can't be found. A fire chief from Shasta County, leading a strike team of five engines from the Sierras, arrives at the beginning of your narrow road bordered by manzanitas, tanoaks, and scotch broom. The fire is a mile away and moving rapidly toward your home.*

*“A small wooden sign tells the chief your road's name -- but there's no indication of how long the road is, if it dead ends or connects to other roads, if a fire engine could navigate all the curves, if there are bridges that might or might not support fire engines, how many homes there are, if the homes have clearance around them, if there's room for fire engines to turn around, if any water is available, and a host of other questions the chief needs to know to make sure his firefighters can work the fire safely. Right now he sees no one evacuating, and the sheriff doesn't respond to his radio transmissions, so he wonders if everyone is gone, if some people are staying to defend their homes, if any elderly or disabled persons need to be rescued, and if so, where they are. What should he do?”*

Local preparation is the key to preventing such life-and-death dilemmas, and the MCFSC is encouraging road associations and small communities to create clear, visible signage that answers this chief's questions and to place it at the beginning of their roads. If residents desire privacy and security of such information, a locked Fire Department/ Emergency

Response box containing laminated maps and other information may be placed at the road's entrance instead.

In recent months MCFSC and fire personnel have begun to seriously and realistically assess life safety issues in areas of Mendocino County where roads are narrow and few. Having all residents evacuate is simply not possible where the only road is barely wide enough for a Type 3 fire engine, with no turnouts to allow for evacuating vehicles. In these circumstances, residents are being presented with information about the two options other than evacuation: (1) sheltering in place in their homes, or (2) moving to pre-designated safety zones. It is emphasized that both options require significant preparation and understanding of fire behavior. With technical assistance from fire personnel, the MCFSC has prepared an information sheet about creating Safety Zones and hopes to prepare another about the many facets of preparing to shelter in place.

Fire prevention forces in Mendocino County are beginning to work together to urge comprehensive preparation for worst-case scenarios of all kinds. They are urging WUI communities to do vegetation reduction, map their communities, improve road and address signage, identify and secure alternate evacuation routes, develop and practice evacuation procedures, identify and clear safety zones where evacuation would be nearly impossible, provide for elderly and disabled persons, plan for large animal evacuation, create emergency communication systems including phone trees and utilizing CBs or ham radios, increase water supply and install fire department connectors, clear areas around ponds, clear helispots or helibases, and numerous other innovative and necessary life safety measures. The MCFSC wishes to have all the county's WUI communities and individual homeowners sufficiently educated and prepared that they and their homes will survive any wildfire.

The ultimate level of structure preparedness will be survivable homes—homes which are not merely “defensible” by firefighters but are able to withstand a wildfire without the intervention of fire suppression forces. These homes, located away from hazardous terrain, built with fire resistant materials, constructed with wildfire's force in mind, and surrounded by carefully maintained vegetation, will be there to welcome their families after the fire has passed.

Another part of the vision, for years to come, will be preserving our watersheds and other natural resources by careful fire break planning, prescribed fire, and other methods. Natural and man-made breaks will be enhanced or created to assist in containing fires to small compartmentalized areas, allowing wildlife to escape, preventing fires from reaching waterways, and guarding against situations leading to post-fire erosion and flooding.

Pursuing this broad vision is a huge task, but one the Mendocino County Fire Safe Council is willing to undertake, to keep our county beautiful and its residents and resources safe.



**APPENDIX A****CALIFORNIA FIRE ALLIANCE LIST OF "COMMUNITIES AT RISK"  
IN THE CDF MENDOCINO UNIT**

<b>Community</b>	<b>Federal Threat?</b>	<b>Hazard Level</b>
Albion		3
Anchor Bay		3
Boonville		3
Brooktrails		3
Calpella	F	3
Camp Rest	F	3
Caspar		3
Cleone		3
Comptche		3
Covelo	F	3
Coyote Valley	F	3
Cummings	F	3
Dos Rios	F	3
El Roble		3
Elk		3
Fort Bragg		3
Gualala		3
Hopland	F	3
Inglennook	F	3
Lake Mountain		3
Laytonville	F	3
Leggett	F	3
Little River		3
Longvale		3
Manchester	F	3
Manchester Rancheria	F	3
Mendocino		2
Navarro		3
Northspur		3
Philo		3
Piercy		3
Point Arena	F	3
Pomo	F	3
Potter Valley	F	3
Redwood Valley	F	3
Rogina Heights		3
Talmage	F	3
The Forks	F	3
Ukiah	F	3
Vichy Springs	F	3
Westport		3
Willits	F	3

## APPENDIX B

### WILDLAND-URBAN INTERFACE OR INTERMIX (WUI) COMMUNITIES IN MENDOCINO COUNTY AS IDENTIFIED BY COMMUNITY MEETING ATTENDEES

Planning Zone	CDF Battalion	Town/Area on At-Risk List	Communities and Subdivisions
1	1	Covelo	Chicken Ridge
			Pigeon Ridge
			Redwood Valley Indian Reservation
			Bauer Subdivision
			Bauer Flats
			Hulls Valley
			Etsel Ridge
			Little Valley
			Hopper Lane
			Mina
			Pink Gate
			Poonkinney Road
			Bald Mountain
			Dingman Ridge
			Williams Creek
			Blands Cove Road
			Mendocino Pass Road
			Perry Ridge
1	1	Dos Rios	
1	2	Brooktrails	Brooktrails
			Sylvandale
			Spring Creek
1	2	Willits	Pine Mountain
			Walker Lake
			Irmulco Road
			Cherry Creek
			Blackhawk
			Ridgewood Ranch
			String Creek
			Williams Ranch
			Hilltop Road
			Sherwood Valley
			Sherwood Ranch
			Shaffer Ranch
			Muir Mill Road
			Foster Mountain
			Canyon Road
			Hearst

Planning Zone	CDF Battalion	Town/Area on At-Risk List	Communities and Subdivisions
1	4	Leggett	Bell Springs Road
		(see also Laytonville and Piercy)	Dell Glen
			Spy Rock Road
			Registered Guest
			Iron Peak
			Blue Rock
			Wildwood
			North Leggett
			South Leggett
			Hales Grove
			Rockport
			Reese Ranch
			Riverdale
			Howling Wolf
			Confusion Hill
			Remores Corner
			Foster Creek Road
			The Hermitage
			Red Mountain Road
			Big Bend
			Mill Bank
			Route 271
			Cooks Valley
			Chinamaya Retreat
			Rabbit Camp
			Resting Oaks
			Milky Way
			Reed Mountain
			Hog Back Ridge
			Pepperwood Springs
			Ebert Lane
			Red Mountain Road
			Red Mountain Creek
			Reynolds/Petersen
			Bear Pen
			Mad Creek
			Empire (Rest Area)
			Camp St. Michael
1	4	Cummings	
1	4	Piercy	Bridges Creek
1	4	Laytonville	Cahto Rancheria
		(see also Leggett)	Cahto Meadows
			Starlight (Hunt) Ranch
			Fox Rock
			Mulligan Lane
			10-Mile
			Cow Mountain
			Wilderness Lodge Road

Planning Zone	CDF Battalion	Town/Area on At-Risk List	Communities and Subdivisions
		Laytonville (cont.)	Road 307
			Black Oak Ranch
			Woodman Canyon
			Cherry Creek
			Twin Pines
			Shamrock Ranch
			Sizemore Ranch Subdivision
			Sherwood Road
			Dos Rios-Laytonville Road
			Steele Lane
			Davidson Road
			Weaver
			Branscomb Road
1	4	Longvale	
1	4	Branscomb	
2	3	Hopland	McNab Ranch
			Russian River Estates
			Bell Track
			Hopland Rancheria
			Hopland Field Station (UC)
			Duncan Springs
			Pine Mountain
			Hewitt-Sturdevant Road
			Old Toll House Road
			Old River Road
			Road 110 / Johnson Creek
			Mountain House Road
			Feliz Creek Road
2	3	Talmage	City of 10,000 Buddhas
2	3	Rogina Heights	
2	3	Ukiah	Robinson Creek Road
			Oak Knoll Road / Fircrest Drive
			Spanish Canyon
			Redemeyer Road
			Deerwood
			El Dorado Estates
			Greenfield Ranch
			Running Springs
			Heartland
			Round Mountain
			Guidiville Rancheria
			Boonville Road
			Pine Ridge
			Mill Creek Road
			Crestview/Fircrest Drive
			Mendocino College
			Eastside/Calpella Road
			Shepherds Lane

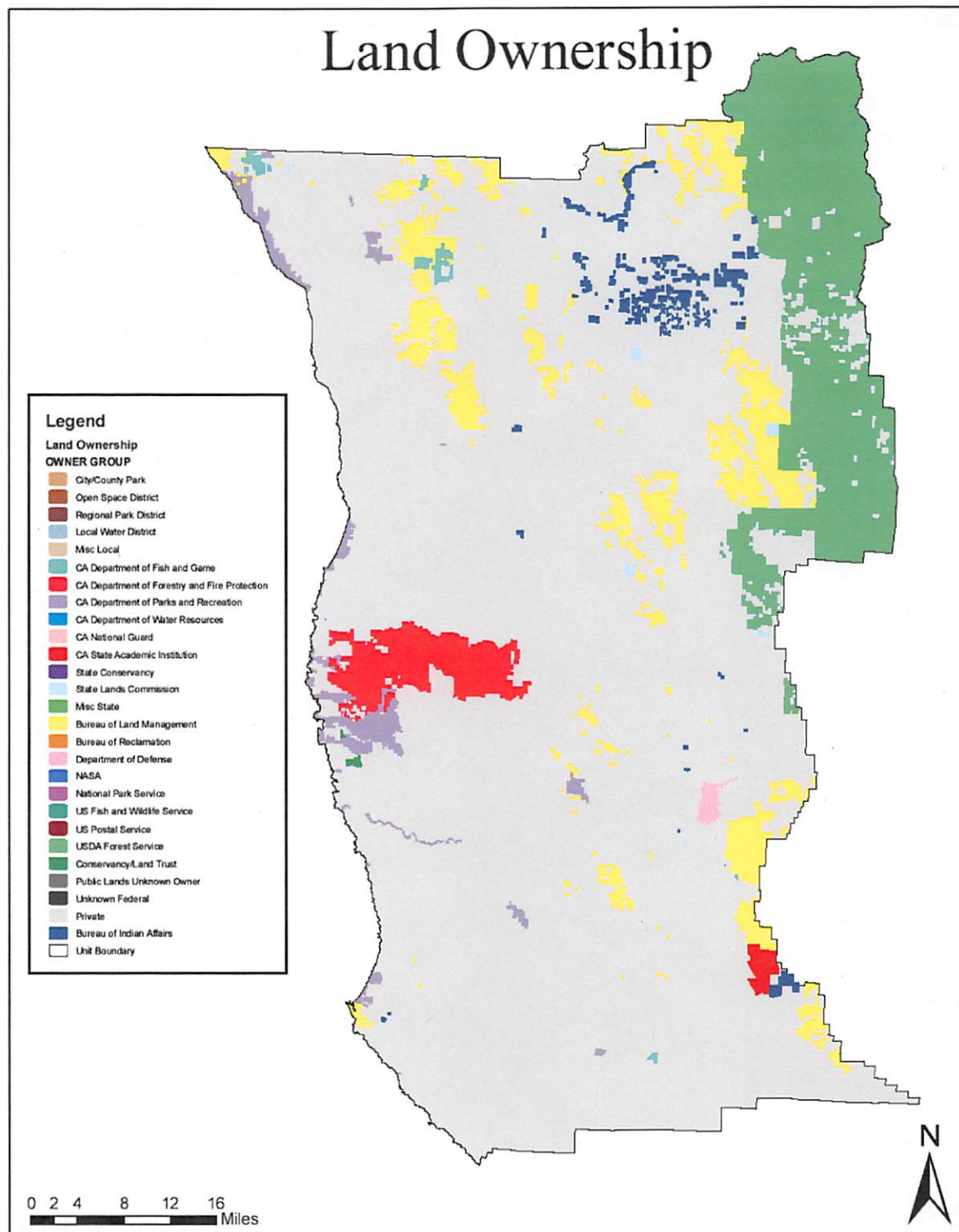


Planning Zone	CDF Battalion	Town/Area on At-Risk List	Communities and Subdivisions
		Ukiah (cont.)	Old River Road
			Low Gap Road
			Orr Springs Road
2	3	Redwood Valley	Black Bart Trail
			Cave Creek Subdivision
			Tomki Road
			Greenfield Ranch
2	3	Potter Valley	Mid-Mountain Ranch
			Potter Valley Reservation
2	3	Calpella	
2	3	Vichy Springs	
3	5	Point Arena	Point Arena Rancheria
3	5	Manchester	Manchester Road
3	5	Manchester Rancheria	
3	5	Elk	
3	5	Boonville	Peachland Subdivision
			Vista Ranch Subdivision
			Deer Meadows
			Floodgate
3	5	Navarro	Rancho Navarro
			Holmes Ranch
			Nash Ranch
			Gschwend Subdivision
			Perry Gulch
			Horse Haven
3	5	Yorkville	Yorkville Ranch
			Hulbert Ranch
			Elkhorn Road
			Mountain House
			Smootville
3	5	Philo	Sky Ranch
			Ray's Road
			Signal Ridge
			Greenwood Ridge
			Clow Ridge
3	5	Gualala	Coastal Gualala
			Gualala Court
			Gualala Mobile Home Park
			Tan Bark Road
			Enchanted Meadows
			Ocean Ridge
			Roseman Creek Road
			Island Cove Estates
			Villa Del Mar
			Timberwood Way
			Moonrise Road
			Rolling Hills
			Bourns Gulch Road

Planning Zone	CDF Battalion	Town/Area on At-Risk List	Communities and Subdivisions
		Gualala (cont.)	Marine View Subdivision
			Big Gulch
			Lofty Redwoods (airport)
			Zetler Road
			Bill Owens Road
			Seaside School Road
			Collins Landing Road
			Schooner Gulch
			Eureka Hill Road
			Mountain View
			Garcia River Road
			Irish Beach
			Cameron Road
			Little Geyserville
3	5	Anchor Bay	
3	5	Elk	
4	6	Albion	Albion Ridge Road
			Navarro Ridge Road
4	6	Little River	The Woods
			Little River Airport Road (and airport)
4	6	Fort Bragg (see below)	Simpson Lane
4	6	Mendocino	Surfwood Estates
		(overlaps with Ft. Bragg)	Mendocino Village Estates
			Hills Ranch
			Little Lake Road
			Dog Kennel Road
			Mendocino Woodlands
			Crestwood
			Jackson Demonstration State Forest
			Chamberlain Creek Camp
			Parlin Fork Camp
			Sherwood Road
			Company Ranch
			Odum Lane
			Little Valley
			Point Cabrillo
4	6	Caspar	
4	6	Inglenook	
4	6	Cleone	Mill Creek
4	6	Comptche	Comptche-Ukiah Road
4	6	Westport	10-Mile
			Hilltop/Walters
			Rockport
			Hales Grove
			Branscomb Road
			Wages Creek
			Ryder Gulch
			DeHaven Valley Road

Planning Zone	CDF Battalion	Town/Area on At-Risk List	Communities and Subdivisions
		Westport (cont.)	Hillshore
			Seaview Drive
			Ponderosa Drive
			Howard Creek Road
			Pacific Heights Drive
			Union Landing
			Westport Beach
			Abalone Point
			Juan Creek/No Name Road
			Hardy Creek
			Thompson Ranch
			South Westport
			Biley Oaks
			Seaside/Ocean Meadows

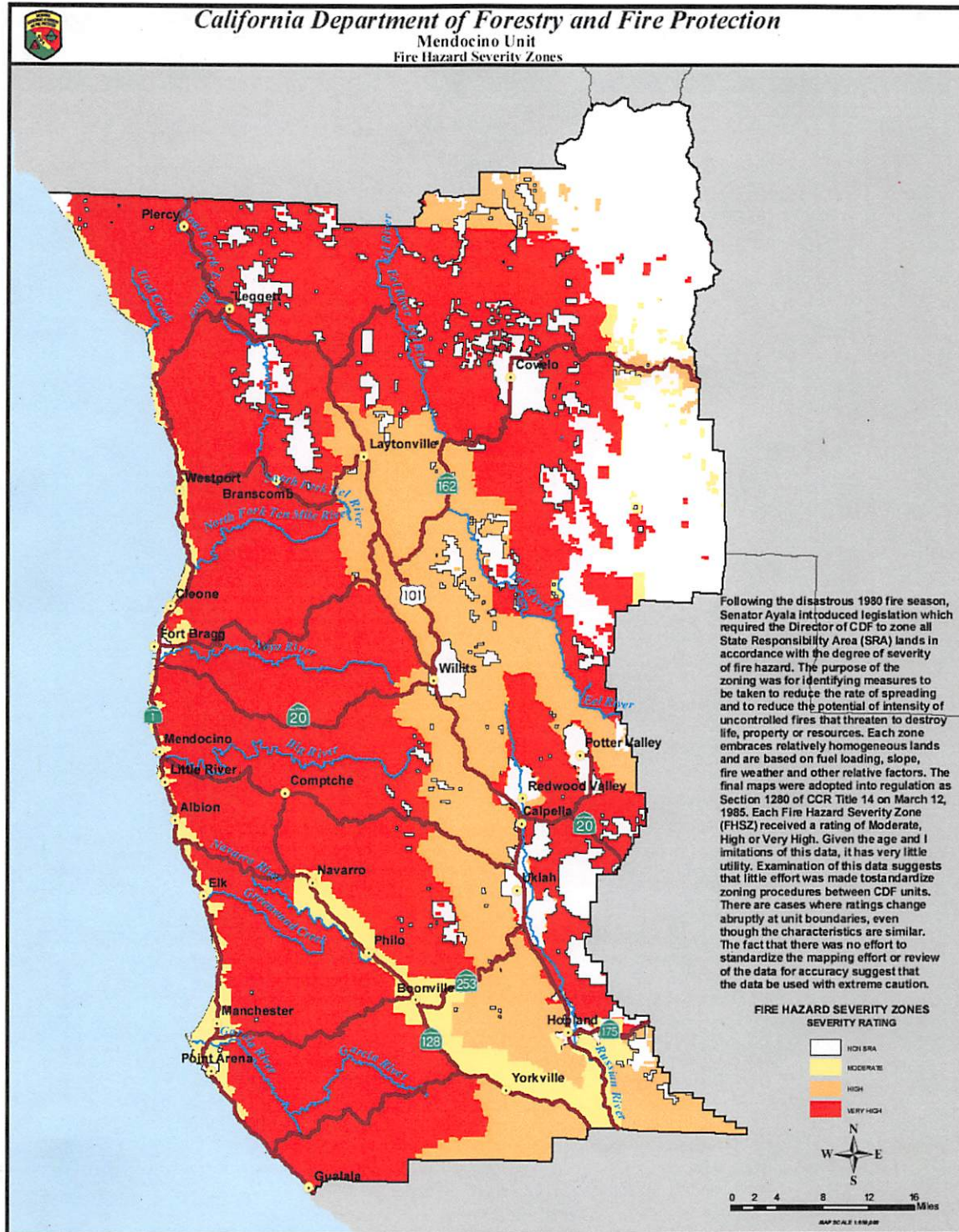
## APPENDIX C





## APPENDIX D

### FIRE HAZARD SEVERITY ZONES



## APPENDIX E

### MENDOCINO COUNTY COOPERATIVE AERIAL FIRE PATROL

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This year (2005) marks the 56th year of uninterrupted service by the CO-OP, the oldest aerial fire detection program in California. The Aerial Fire Patrol's early fire detection capability provides an important link in the protection of the lives and property of all Mendocino County citizens. YOU can play a vital role in keeping the Patrol in the air either by joining the CO-OP or by making a contribution.

The CO-OP Aerial Fire Patrol of Mendocino County has discovered over 961 fires since its beginning in 1950, including 18 fires in 2001, 6 fires in 2002, 12 fires in 2003, and 8 first reports in 2004. The Co-op Aerial Fire Patrol is a privately financed airborne fire lookout organized by subscribing landowners, and operated by an aircraft contractor in cooperation with the California Department of Forestry and Fire Protection (CDF). An elected Board of Directors provides policy for operation of the CO-OP and liaison with the CDF who is responsible for fire protection in all unincorporated areas of the county.

Flying at high altitudes when fire weather is dangerous, the Aerial Fire Patrol provides an essential means of early detection and reporting of wildfires not readily visible from ground patrols and local citizens. This aircraft is often the first to arrive at fires, giving exact location, fuel type, potential spread, and road access routes for fire crews. It also provides an essential service following lightning storms, holidays, and other times of high fire risk, or when dispatched on special fire assignment.

The CO-OP represents a multitude of interests to include watershed management, ranching, livestock, recreation, vineyards, subdivisions, and timber production. Federal and state lands are involved as well as a municipality and a utility. In 2005, ninety-three (93) owners and contributors (a record high) subscribed 666,820 acres throughout Mendocino County and northern Sonoma County.

Full participation of past subscribers ensures 80 days of aerial fire patrol flights across Mendocino County. Flights occur over the July 4<sup>th</sup> weekend and from August 1<sup>st</sup> to October 15<sup>th</sup>.

Mendocino County Cooperative Aerial Fire Patrol  
17501 North Highway 101  
Willits, CA 95490  
(707) 459-7414

## FIRE PLAN CONTACT INFORMATION

Comments and questions regarding this Community Wildfire Protection Plan are welcome. This is a living document, and corrections, additions, and deletions will be made at frequent intervals. Please contact the two primary contributors:

Mendocino County Fire Safe Council  
P.O. Box 1488  
151 Laws Avenue  
Ukiah, CA 95482  
(707) 462-3662  
[firesafe@pacific.net](mailto:firesafe@pacific.net)  
[www.firesafemendocino.org](http://www.firesafemendocino.org)

California Department of Forestry and Fire Protection  
Mendocino Unit  
17501 North Highway 101  
Willits, CA 95490  
(707) 459-7414  
[www.fire.ca.gov](http://www.fire.ca.gov)

This document may be found on the Internet at  
<http://www.fire.ca.gov/FireEmergencyResponse/FirePlan/pdf/Mendocino.pdf>

Further information about Fire Safe Councils, CDF, and wildland fire safety may be found at these sites:

- California Fire Safe Council [www.firesafecouncil.org](http://www.firesafecouncil.org)
- California Fire Alliance [www.cafirealliance.org](http://www.cafirealliance.org)
- California Department of Forestry and Fire Protection [www.fire.ca.gov](http://www.fire.ca.gov)
- Firewise Communities USA [www.firewise.org](http://www.firewise.org)

A more detailed list of fire safe resources will be included in future versions of this Plan.

Educational materials mentioned in this Plan may be obtained from the Mendocino County Fire Safe Council at the address listed above.